

# **The role of local NGOs in the conservation of environment**

**A case of: Khartoum North locality**

**By**

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# Dedication

To my parents,

To my brothers, to my sisters

To my family and

To my friends

*Mutasim*

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I would like to express my gratitude to my supervisor Dr. ElAmin Sanjak Mohammed Ali who provided me with support, guidance, encouragement and advice during the course of the study

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## **ABSTRACT**

### **The role of NGOs in the conservation of environment A case of: Khartoum North Locality**

A well-established community based institution can carry out functions related to natural resource management, provision of service, communication of information, and building of community cohesion. One of the prerequisite of the execution of communal activities is the organization of local communities into formal and informal organizations. This is the main strategy followed by the NGOs for sake of attaining participatory management of the natural resources and to guarantee sustainability of activities. Although much experience has been gained in how to develop local organization for management of forest resources, it is still unclear what the long-term developmental impacts of these organizations will be, particularly on forest-dependent group's. After the phase out of the international NGOs from the Sudan due to political reasons, parallel local organizations emerged to sustain the activities introduced by the international NGOs. The broad objective of the research is to highlight the activities conducted by the local Non- government organization for sake of investigating the potential of these organizations with respect to the conservation of the environment in a sustainable manner and raising the awareness of the local people.

Two local NGOs were selected for this research namely; Sudanese Society for Environment Conservation (SSEC) and National Network for Afforestation (NNA). Khartoum North Locality was selected for this research. In this study, two types of data were used to collect the necessary information, namely; primary data and secondary data. The source of the secondary data includes FNC documents, files, projects documents, and annual reports. The primary data was collected through face – to – face interviewing and self-administered questionnaire with the members of the local NGOs.

The main findings of the research are; the local NGOs have plans for the conservation of environment and raise of ecological awareness but confronted by lack of fund and genuine participation of local communities. The activities introduced by the organizations are of small-scale nature and not on a sustainable manner. Communications between the organizations and the local people is limited and sporadic. Meetings and mass media are the main methods for the dissemination of information and mobilizing the local communities. Moreover, the organizations failed to organize the local communities into working groups and revealing the ambiguity of the political allegations of the organizations.

The main conclusions are; the relationship between the organizations and the local people is poor. There is no specialized extension unit for the dissemination of extension services. The organizations are under funded and rely on the membership fees for the implementation of the small-scale activities. Moreover, the research arrived at useful recommendations.

## ABSTRACT (ARABIC)

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# **CHAPTER I**

## **INTRODUCTION**

### **1.1. Background**

Several Sahelian governments have made local institution building a core element for rural development. Local institution building is also a priority for most donors and NGOs operating in the Sahel region. State sponsored institutions are seen as possible focal points for the provision of services, resource management and development. Decentralization is also seen as part of the process of building more effective, responsive and democratic institutions related to local needs and popular demands. Local governments have seldom been given the mandate and resources to become effective, while at the same time customary institutions have been undermined and lost their legitimacy. A variety of new formal and informal organizations are evolving-often sponsored by donors, NGOs or the state, but their viability is still uncertain. Local institutions in general are organizations, which are meant to regulate individual and collective actions, by communities to safeguard their economic, social, culture and political interest. A well-established community based institution can carry out functions related to natural resource management, provision of service, communication of information, external relations and political lobbying, and building of community cohesion and moral.

The energy crisis and desert encouragement of the seventies and early eighties have drawn the attention of the world. Sudan is one of the countries that faced these dilemmas. Accordingly many Non-Governmental Organizations showed initiatives to work in the country. One of the prerequisites of the execution of communal activities is the organization of local communities into formal and informal organizations. This is the main strategy followed by the NGOs for sake of attaining participatory management of the natural

resources and to guarantee sustainability of activities after the phase-out of the NGOs projects.

### **1.2. Scope of the research**

For rural development programs, the first difficulty lies in reconciling two groups of important measures. On the one hand: motivation, extension and training which provide the population with the means, tools and knowledge they need to participate in the program from the planning stage and the definition of objectives; and on the other: planning and programming. To succeed, motivation, extension and training activities must be combined with concrete technical operations corresponding to the priority requirements of the population and depending on the potential of the area and the means available. The local organizations have to face numerous difficulties. Although much experience has been gained in how to develop local organizations for management of forest resources, it is still unclear what the long-term developmental impact of these organizations will be, particularly on forest-dependent group's access to resources. A serious one is tradition; another is illiteracy and lack of ecological awareness. The relationship between the local community and the local organization in charge of the program will depend to a large extent on the attitude of the staff carrying out the work and in particular the field staff

### **1.3. Problem statement**

Sudan has been a target for plethora of NGOs for sake of mitigating desert encouragement through different scenarios and to reduce reliance on tree cover as a source of fuel and building materials. These projects, as one of its strategy, are the formation of different organizations based on gender and age groups for the management of the resources and sustain the achievements, if any. Due to political reasons, almost all the project phase-out and ceased all their operations in the country. This action draws the attention of Sudanese intellectuals in the field of environment to establish many voluntary organizations to conduct similar activities in the field of forestry. This step is

further supported by the low budget of the Forests National Corporation (FNC) which is incapable of mobilizing the local people to adopt tree planting. The starting premise of the research is to cover the different activities conducted by voluntary local organizations and their ability to sustain activities. This research focuses on two local NGOs, namely; Sudanese Society for Environment Conservation (SSEC) and National Network for Afforestation (NNA). Khartoum North Locality was selected for this research.

#### **1.4. Objectives of the research**

The broad objective of the research is to highlight the different activities conducted by the local Non- government organization for sake of investigating the potentially of these organizations with respect to the conservation of the environment in a sustainable manner and raising the awareness of the local people, more specifically:

- 1- To assess the potentially of the organization with regard to activities conducted, membership and its competency to substitute the NGOs.
- 2- To explore the communication and extension methods deployed to recruit local people in the organizations activities.
- 3- To investigate the problems and constraints confronting the local organizations.
- 4- To explore the perception of local communities towards these organizations.

#### **1.5. Research questions**

To tackle the issue of local NGOs and for sake of achieving the objectives of the research, broad questions (research questions) were formulated. Finding answers to these questions will highlight the role of the local NGOs with regard to environment conservation in a sustainable manner. These questions are;

- 1- What are the methods deployed by the local NGOs to meet their objectives?

- 2-** What are the types of activities conducted by these organizations?
- 3-** How the local NGOs were able to recruit local communities in their activities?
- 4-** What are the main constraints which confronted the activities of the NGOs in the study area?



## **CHAPTER II**

### **LITERATURE REVIEW**

#### **2.1. Introduction**

The term Non-Governmental Organization (NGO) came into currency in 1945 because of the need for the UN to differentiate in its charter between participation rights for intergovernmental specialized agencies and those for international private organizations. At the UN, virtually all types of private bodies can be recognized as NGOs. They only have to be independent from government control, not seeking to challenge governments either as a political party or by a narrow focus on human rights, non-profit-making and non-criminal. The structures of NGOs vary considerably. They can be global hierarchies, with either a relatively strong central authority or a more loose federal arrangement. There is international umbrella providing an institutional structure for different NGOs that do not share a common identity (Kerkhof, 1999). Local NGOs are so diverse and so controversial that it is not always possible to support, or be opposed to, to international NGOs. They may claim to be the voice of the people and to have greater legitimacy than governments, but this can only be a plausible claim under authoritarian governments. However, their role as participants in democratic debate does not depend upon any claim to representative legitimacy (Kerkhof, 1999).

#### **2.2. Environmental Degradation**

Degradation as a concept invokes the ecological concept of "carrying capacity", which is the ability of an environment to sustain the resource demands of a species or a community without losing its ability to regenerate the resource. Degradation usually means that carrying capacity is reduced by some natural or human phenomenon (Nicholson 2002). General consideration on the protective and environmental role of forests the forest can deliver the functions of protection or conservation expected from it only if it is either in its natural state and under good natural ecological conditions or,

when in use, it is managed in a sustainable manner. Under such conditions, health and vitality are very important. It is the vitality of forests that allows them to grow with sufficient strength and vigor in a way that will counter physical forces affecting soils through water erosion (World Bank, 1992). A quarter of people in developing countries lacks adequate housing. If people are forced to live in poor environments - such as marginal land and slums- it can influence their own sense of self-worth. Rubbish in streets and open drains are a health hazard and a reflection of people's exclusion from society. Lobbying for improvement in their environment often leads to other beneficial changes in poor peoples lives. Communal management systems, such as water or forest user groups, can improve social networks and strengthen the collective voice of the poor (UN, 2001).

The poor are particularly vulnerable to shocks and stresses. Environmental conditions can contribute to both long – term stress and short- term shocks environmental resources, such as wild foods, are important safety nets in hard times. Environmental stress and competition over scarce or valuable resources are an increasingly important contributing factor to conflict. The poor are often worst affected in times on conflict, having little political influence, and the least resources to cope with physical loss. A safe environment is very important to people. People value clean and safe areas in which the live, and safe means of transport. In many countries, women without access to sanitation may put themselves at risk when seeking privacy (UN, 2001).

The effect of environmental degradation is not immediately apparent. In sub-Saharan Africa, threats to sustainable use and development are many and wide ranging, and hinge mainly around satisfying the requirements of rapidly growing population. Vegetation has been cleared and deforestation has occurred for settlements and to satisfy food needs. The frontiers of cultivation have been pushed further into semi arid lands, again due to increases livestock herds and charcoal burning. Practice has shown that when

these competing needs to be satisfied between people and wildlife the later tend to lose (World Bank1996). Moreover, some of the development activities in Africa are occurring at high cost to the environment. Habitat destruction is causing loss of biodiversity and the reduction of environmental resilience. The effects of drought and dry spell in semi-arid regions have been exaggerated and exacerbated by increased vulnerability of the poor rural communities to food shortages and famine. In the hope of increasing food production opportunities new fields are opened which lead to further increasing desert-like conditions. Thus communities find themselves caught up in the viscous cycle of poverty and to conserve biodiversity in vulnerable areas should play significant roles in terms of activity contributing to rural livelihood needs as well as conservation objectives. The absence of this understanding has bred conflicts of interest, with both the biodiversity conservation efforts and community livelihood systems being the ultimate loser (Okigbo, 1995).

In Sudan, conservation of natural forests and woodlands is still the main strategy and source of agricultural where about 200.000 ha of natural woodlands and forests are annually replaced dry land mechanized agriculture in addition to mechanized dry land farming fuel-wood and charcoal are the major sources of energy for the vast majority of the people of the Sudan comes from biomass. About 9.5 million tons of oil equivalents (TOE) of biomass energy are currently annually consumed from more than 3 million ha of forests-land in Sudan (FNC 2000). The consequence of agricultural intensification and excessive trees felling for energy purpose is serious deforestation problem in Sudan (Hassan and Hertzler 1988).

### **2.3. Natural resource perspectives**

The move towards decentralization of resource control and management promises more efficient, equitable and sustainable resource use. Debate centers on what type of institutional arrangement in a give context is most appropriate and will lead to the fulfillment of the above ideal. Aspects of

these arrangements include property rights structures as well as organizational structures (Odi, 1996). Over the last two decades in South Asia there have been considerable changes in the institutional arrangements for forest management. Much of the debate concerns the degree to which the State should divert control of forest lands to other stakeholders. Some argue that total privatization to rational individuals will lead to more efficient and sustainable use. At the other extreme are arguments that only the State can protect forest resource for the interests of multiple and often competing stakeholders and future generations. Along this continuum lie a series of institutional arrangement. The common property literature points to the potential of sustainable group management of forests, where there are adequate individual incentives, secure long-term tenure arrangements and group-imposed restrictions (Odi, 1996).

In the forest sector, new approaches such as Joint Forest Management (JFM) which involve both local people and State entities were adopted in many countries of south East Asia. In the past, forest staff perceives forest users as destroyers of the environment whereas government is the custodian. The JFM approach immerges to bridge the huge gap of confidence between the local people and the state. Community forestry in Nepal moves further by asserting that the States role is to regulate and to retain ownership rights, and to divert total management control to the users of the resource. Thus the usual dichotomy between public and private management is only a crude tool for analyzing institutional options. By contrast, the concept of a continuum of options eschews simple property rights scenarios, seeking options suited to the particular conditions and context of the resource ( Sarin, 1993).

#### **2.4. Constraints confronting management of natural resource in arid land**

Different authors managed to highlight the constraints associated with the management, conservation and sustaining the natural vegetation cover in the arid zone;

- According to Agnew and Warren (1996) the difficulty and complexity of dry land management have led to the disregard for their problems. Paucity of data: data are inevitable limited in sparsely populated and impoverished regions such as dry lands.
- Lack of solidarity, peace and appropriates at the global level. Moreover, poverty is major retardant on development including that of agriculture. Global economic situation has severely hindered agricultural development (Barrow 1987).
- The price policies for export trades, which are determined by industrialized countries, are putting at risk commercial exchange even between devolving countries (Soares 2001).
- Inequitable terms of domestic trade are not unusual for farm prices to be held artificially low in order to ensure cheap food supplies so as to avoid unrest in cities (Barrom 1987). In Sudan there are great differences between the export prices and prices at production sites of gum Arabic, livestock etc.
- Arid land is usually characterized by having limited soil resource (shallow, unbalanced in texture, with high amount of salts and hardpans (WHO, 1990).
- In arid and semi arid regions the soil is subjected to severe water erosion due to high rainfall intensity and consequently frequent runoff (WHO, 1990).
- Lack of efficient and appropriate extension services and land tenure systems.

## **2.5. Rural development**

Rural development as strategy is designed to improve the economic and social life of a specific group of people; the group includes small- scale farms, tenants and the land less. It involves helping the poorest among those who search for a livelihood in the rural areas to demand and control more of the benefits of development (Chamber 1983). Rural development may also be

defined as extended efforts towards improvement of standard of living of rural people with participation in an integrated manner at all different sectors (Mubarak, 1997).

Rural development in developing countries is crucial since more than 80% of the population of these countries live in rural areas. During the 1940's the concept of community development had been introduced mainly by the British colonies, the United Nations and few independent third world countries to promote rural development. It aims at uniting the efforts of the people with the development organization efforts in order to improve the economic, social, culture and environment conditions of the communities therefore, community development and participation are historically interrelated although they are different phenomena (UNDP and CSOPP, 1989). In reference to development, there are many questions need to be asked about rural development like what does it mean and how can it be achieved? However, if agricultural and rural development aims at a progressive improvement in levels of living achieved primarily through increase in small – farm incomes, output and productivity then it is better to identify the basic conditions essential to its achievement (Todaro, 1987)

## **2.6. Expanding political constituencies to reconcile environment and development**

In most countries there is a changing and growing constituency in the forestry sector. There is also a growing number of public and private groups and formal organizations active and often times competing in forestry- related activities. Such competition rather than the search for collaboration can, of course, lead to both positive and negative results (Adeyoku 1976). On the positive side, a World Bank Study on institutional strengthening found that most organizations that were exposed to some form of competition had a higher level of institutional performance than those that were not (Israel 1987).

## **2.7. Possibilities of privatization of forests resources**

Except for small patches of forest close to a villager's house, it is virtually impossible to protect the forest against the predations of outsiders. In such circumstances the costs of individual protection would far outweigh any benefits. It therefore makes sense for a group of forest users to come together to manage the resource in common, thus spreading the costs of protection across a larger group of people (McKean, 1995). Foresters and researchers recently have begun to identify existing indigenous management systems which are of a wide diversity of social and ecological settings. A number of these have been in operation for decades while others are recent responses to a changing institutional framework (Malla's, 1992). Management ranges from extensive systems limited to protection and some harvesting, to intensive management using an array of silvicultural techniques. Forest property regimes range from open access to common property. In each category there are different institutional arrangements operating with varying degrees of success. These are not for discrete forms of forest management; rather there all co-exist with some forms moving forward into new arrangements and others regressing into previous forms of control (Sarin 1993)

### **2.7.1. Collective management**

The focal point in all collective resource management situations is to determine the conditions necessary to trigger local people to implement their own institutional arrangements that change the structure of the situation in which they find themselves. India and Nepal provide a good experience in the development of collective management systems and their effectiveness (Ostrom, 1990). The main issue of local organization is clearly identifiable on criteria of residence and proximity to the resource to be managed. Previous practice of allocation of forests to the local administrative bodies excluded many of the traditional forest users who happened to reside outside the boundary, leading in many cases to non-functional committees and disenfranchised users. Experience proved that reliance on the formal

structures to represent forest users is also not effective. Rather than relying on legal and administrative boundaries, it is necessary to identify who has the right to be a member of a local forest organization. In many cases residents of one village have longstanding negotiated forest rights in an entirely different village. Problems still arise in areas of extensive forests where a complex of users differing by season and product may have an interest in the management to the forest (Ostrom, 1990).

### **2.7.2. Size and constituency**

There is logic in limiting the size of the group where decision-making is based on consensus. In Nepal large groups of over 300 household were no less effective than small groups of fewer than 100 households. Well-represented and managed large group may be more effective than a non-representative, poorly managed small group. Even an ethnically homogeneous group may be deeply divided in terms of individual dependence on public forest resources and thus interest in and incentive for protection of the forest (Odi, 1996). Consensus about who should constitute the user group is one of the most critical factors in development of a robust social organization. Community forestry organizations in Nepal are formed after investigation of users of a forest area. In the case of existing indigenous management systems, user's identification is easier to achieve because there is already a recognized group of people accepted as users of a particular forest area. In case where there are existing village arrangements for reaching consensus within or beyond natural resources management systems are likely to be more effective (Odi, 1996).

### **2.7.3. Recognition of user and legal rights**

Diagnosis of user and legal rights has been a key factor underlying JFM planning in the limited area where JFM has been attempted. Divestment of management to forest users often leads to increased conflict, in particular over boundary demarcation, over recognition of customary as well as legal right holders, between primary and secondary users, between marginalized and



non-marginalized groups. In all cases, where organizations continue to be able to sustain management, such conflicts are resolved at the initial stages of group formation and subsequently as they arise. Often their resolution requires the use of external arbiters, a role usually played by Forest Department staff or NGOs (Sarin, 1993).

The relationship between resource scarcity and collective action appears to be relatively straightforward as in Nepal. Equally, however, there are examples of collective action in areas of high resource availability. It is not therefore simply scarcity that drives local initiative, it also requires leadership, consensus on action to be taken, ability to enforce restrictions and conformation from government that local organizational units are scarcity while local action is useful broad-scale planning tool, many other factors need to be considered. There are also conditions where the land is too degraded and thus the investment to bring it into production is too great for local people to undertake. In such case, it is unlikely that collective action will be possible since the future benefits are uncertain and the immediate costs very high (Ostrom, 1990).

However, tree planting as a viable option only for those household with adequate areas of land. Poorer household will continue to rely on a degrading resource and in the absence of local management systems will be forced to travel longer distances to more productive forests. The general trend is the JFM activities are most successful in villages which are neither too close to the forests nor too far and having low forest dependence, and thus little interest in investing labor in its protection. The relative power of sub-groups has an important influence on forest management decisions and ultimately on the effectiveness of forest management organizations. There are cases where marginalized groups whose livelihoods depend on the forest have little involvement in decision-making and have been denied access to the resource under stringent new protection rules (Odi, 1996).

#### **2.7.4. Investment in forest resources**

Some of the most successful local management initiatives have occurred where there are immediate benefits obtainable by the local groups. Conversely, where local people have had to wait several years before there are any returns, interest has often declined and in consequence the resource has degraded due to cessation of protection (Odi, 1996). With changing economic circumstances, the demands for wood and non- wood- based forest products are increasing, thereby helping to move the focus beyond subsistence and beyond single products. However, markets are difficult to predict and products that have a high value today may equally have a low value tomorrow, possibly endangering the viability of resource management organizations (Odi, 1996).

#### **2.8. The institution context for forestry projects**

Institutions are defined as the sets of rules by which societies live. They include the formal rules established by law and official regulations and the informal ones established at the initiative of people, expressing the wishes and needs of their constituents. Organizations are established to help focus the development of rules, formalize them through codification, legalization, or social contract and enforce and implement them through incentive, persuasion or force. There are different types (public, private, nongovernmental) and levels (national, provincial, local) of institutions (FAO 1969).

The success or failure of local institutions and the process by which they are identified, designed, chosen and implemented, depends to a great extent on the nature of the institutional context, and whether the relevant institutions allow the recognition of diverse interests and legitimize the participation of all major actors in the planning, implementation and management of local institutions (King 1972). The importance of local institutions in shaping the forestry sector in a country can not be overstressed. The nature and structure of the existing institutional frameworks are critical determinants of the extent, magnitude and sustainability of local institutions. In the 1990s and beyond

many developing countries faced with difficult choices. On one hand they will have to deal with the problems of diminishing areas of natural forests, declining timber and fuel wood supplies, and constant or possible decline of financial and human resources available to the public sector. On the other hand forestry institutions will have to cope with increasing political and public pressure to do more in basics and in new agenda items thus institutional considerations are of direct concern in the discussion (FAO 1993).

A number of common weaknesses related to institutional constraints of various level need to be considered in estimated future local institutions impacts and the sustainability of benefits. The more common of these are (Gittinger 1982, Banm and Tolbert 1985):

- Lack of continuity, because of change in government policy, budget or personnel.
- Failure to make sufficient allowance for recurrent costs.
- Overambitious expectations of success are unrealistic.
- Costs are consistently under estimated and benefits over estimated
- Projects are too large, subsuming component activities which should better be assessed separately

It is quite evident from past experience, that many of these institutional weakness can have a direct impact on local institutions outcomes and thus on the impact of projects in terms of national, regional and local objectives. However, local institutions are characterized by increasing complexity, not only in terms of the array of objectives and outputs considered, but also in terms of the involvement of groups other than traditional forest services. Further complexity is added by the growing interaction between forestry and other sectors and the institutional linkages that are created. In essence, three board's sets of concerns exist at the management level of local institutions: revenue generation, management to meet local needs, and environmental benefits (FAO 1993).

On the policy side, there also are many concerns. First there are many situations of conflict between sustainable economic development and the preservation of social equity (Gregersen, 1993), between forestry policy and fundamental social goals, between public goals and private interests. Many countries have introduced numerous protective regulations and subsidies designed to preserve natural forest resources or encourage tree planting that in the aggregate generate negative effects on the forestry situation and fail to meet local expectations (Repetto, 1992).

#### **2.8.1. Congruence between use rules, local conditions and infringers**

In indigenous systems the rules surrounding use of forest products are generally based on limiting the access to particular periods of time, and may use physical protection. The rules vary from group to group and are dependent on the type of product, demand and the ability of the group to impose sanction. However, all these rules can only work as the forest-users believe that there are enforceable sanctions. This is particularly the problem where groups have no legal basis and therefore can neither effectively threaten insiders who transgress against the group rules nor deter outsiders from using the resource. User participation in the formulation and modification of rules has been an important strength of local organization (Odi, 1996).

The overriding factor that determines the effectiveness of local organization is the nature of the resource to be managed in terms of its divisibility and its ability to produce a flow of short-term as well as long-term benefits. However, there is no evidence to suggest that these organizations will be maintained into the future if the market for products obtained from the managed commons is diminished. Thus neither the organizations nor the management system are inherently, rather their functioning is dependent on continued ability to opportunities in both production and marketing (Odi, 1996). Although there have been some notable worldwide failures to develop local organizations for forest resource management, it is apparent that where

there are well-developed incentives the interest to organize is relatively easy to facilitate. However, there are several guiding principles that should be followed to develop local institutions:

- The boundaries of the resource must be clearly demarcated and agreed by the users
- Boundaries should be defensible (small area to guarantee protection)
- The right to use and manage a resource should be clearly agreed and upheld by the legal and policy framework;
- The users of the resource and their relative rights to it must be clearly identified before handing over areas of land to be managed.

Provision of subsequent support to the organizations and their further institutionalization will require that adequate horizontal and vertical linkages are developed between local organizations and government and other sectoral organizations. The development of linkages between sectoral and political decentralization is also an important part of ensuring sustained institutional change from bottom to top. The forest Departments in both India and Nepal still retain a large amount of power and control over the village forest committees, indicating that divestment has only partially been implemented. Currently, in India local forest organizations do not have any other institutional structure through which to question the actions of the Forest Department, or other line agencies; and in both India and Nepal the Forest Department retain the right to dissolve forest committees that they consider to have transgressed against the agreement (McKean, 1995).

### **2.8.2. Placement of forestry in an organizational context**

The institutional framework for forestry must address the multiple ecological, economic and social roles of forests and trees and the combination of public goods and intangible values and market products. It must increasingly cope not only with state property and private property, but also with all of the gradations of open access and common property resources which lie in between. It requires organizations and laws that can deal with issues of

sustainable development, or the delicate balance between protecting the resource and providing opportunities to use the resource, especially for the poor. Those functions that are to be performed by public administrations, such as regulatory, control, information collection and analysis functions should be clearly spelt out (Miranda et al 1990). Legislation, regulations, and local institutional mechanisms are needed to define which areas of the forest would best be leased to or left under local groups' management and which should remain under the control of government authorities. Critical issue in the recognition of local control over the resource use is whether the local institutional set-up can internalize the vested interests of local populations which encourage collective action. At the same time government policies and programmers will need to recognize use roles which are compatible with local needs and capacities (Hummel 1984).

### **2.8.3. Intersectoral institutional issues related to forestry projects**

Identification and formulation of project has become much more complex as projects have to deal with the wide variety of socioeconomic and environmental dimensions of forestry. Many of the factors which drive the issues with which forestry is now trying to grapple, such as deforestation due to encroachment by the land hungry poor, lie in other sectors. Solution, therefore, often have to be found outside forestry- in changes in patterns of land use, agricultural pricing, etc. However, these strong intersectoral linkages often are ignored (World Bank 1991). A World Bank study of 335 completed agriculture and forestry projects in 92 developing countries reported that "countrywide assessments of the state of resource management, or of developments that were affecting the use of renewable resources, were rarely made. Since this wider context was often lacking the selection of projects tended to be opportunistic (World Bank 1991).

### **2.9. Driving forces for local Non-Governmental Organizations**

Two of the greatest global challenges are the elimination of poverty and the reversal of environmental degradation (population growth). These challenges

are inextricably linked. They are reflected in the Millennium Development Goals, to which the international community is committed. The goals include eradicating extreme poverty and hunger, and ensuring environmental sustainability (UN, 2001).

### **2.9.1. Population Growth**

Population growth increases the demand for goods and services, and, if practices remain unchanged, implies increased environmental damage. Population growth also increases the need for employment and livelihoods, which exerts additional direct pressure on natural resources. More people also produce more wastes, threatening local health conditions and implying additional stress on the earth's assimilative capacity (Preston. 1992).

A study of six sub-Saharan African countries indicates that technological innovations are not keeping up with the demand of rapidly rising rural population. As a consequence, in many place- Ethiopia- southern Malawi, eastern Nigeria, and Sierra Leone, farming is being intensified through shorter fallow periods rather than through the use of better inputs or techniques. The distribution of people between countryside and towns also has important implications for the types of stress placed on the environment (Preston. 1992). Developing country cities as a group will grow by 160 percent over this period, whereas rural population will grow by only 10 percent. The pace of urbanizations poses huge environmental challenges for the cities. This situation necessitates more consideration for problems of sanitation, clean water, and pollution from industry, energy, and transport (Preston, 1992).

### **2.9.2. Poverty**

Today's \$40 trillion global economy is characterized by dramatic developmental differences and stark contrast among the world's 6.2 billion inhabitants. Global demographic divides and consumption chasms perpetuate poverty and degrade the environment. Addressing these inequities and enhancing the quality of life for current and future generations are among the

central aims of sustainable development (UNFPA 2001). Population, poverty and pollution are linked through complex interactions. Without doubt the health of Earth's environment is closely related to both demography and consumption patterns. Generalizations about the negative effects of population growth on the environment have long caused misunderstandings. (UNFPA 2001). Wealthy developed nations with stable population levels are now the driving force behind environmental degradation. Developed nations release most of the harmful emissions affecting the environment and generate the most waste. With 20 percent of the population, developed nations account for 86 percent of private consumption. In contrast, the poorest 20 percent of the global population accounts for only 1.3 percent of private consumption. A child born in the developed world will have an ecological impact equal to that of more than 30 children born in developing countries. Poverty can also have serious environmental consequences. Without the technology, knowledge and rights needed to achieve sustainable development, poor people may severely damage the environment in their quest for food, fuel and water (UNFPA2001).

The environment is the living and non- living world around us, and the goods and services it provides. The environment provides water, energy and raw materials, and is a recipient and partial recycler of waste. It is also a source of financial, culture and spiritual value. Economic development depends on the environment for raw materials, water and energy. In many developing countries, 80-90% of jobs are based on natural resources and 80% of export earnings come of agricultural products (UN, 2001). The poor often depend on a wide range of activities that constitute their livelihoods. Many people, especially the landless, depend on food and other resources – fuel, fodder, building materials and medicines – from a diverse natural environment. Government policy, law and local customs are often discriminatory and undermine people's ability to secure their livelihoods (UN, 2001). 800 million people are chronically malnourished and approximately a third of the



world's population lack food security. The environment is a vital part of peoples coping strategies. At a global, climate change may have major impacts through gradual changes in rainfall, temperature, sea-level and increased frequency of extreme events (UN, 2001).

Education is a high priority for the poor as a crucial route of poverty. However, children can spend significant time helping with household tasks when environmental resources are scarce and often miss school. Where educational facilities are limited, the environment itself can be used as a learning resource. In fact, locally relevant environmental education helps attract people to literacy classes. Education also provides people with information that helps improve environmental management (UN, 2001).

#### **2.10. Forest resources and social values**

Forest resources or forest values reflect the relative importance people assign to forest objects or ideas about forests. As peoples values with respect to natural resources interact and change over time, forests are perceived in new and different ways. Social values are realized by individuals, groups, organizations, communities and populations, are produced through a function of ecological and/or human structure and processes, and occur at a wide range of geographic scales, including local, regional, national and international. Some social values are more easily identified and measured than others. The result is disagreement about their relative value. For social value that are traded in the economic market place, there is little dispute. According to Brashaw (1995). Goods and services are exchanged in markets using an agreed upon scale to measure relative worth. However, the lack of markets for non- economic social values, such as ecological values, leads to a variety of problems, listed as follows:

- It is difficult to understand how they are distributed from person to person and across society.

- It is difficult to measure how they change in relative importance over time.
- It is difficult to measure their relative worth vis-a-vis values that are measured monetarily.
- It is difficult to understand how policy changes and actions affect these values and whether such changes are socially optimal.

The difficulty of understanding and measuring many non-economic social values has contributed to their low political profile. Many social values have been unaccounted for in management programs. This may have reflected the lack of importance the planners have attached to these values. However, at other times, values that were important to the public may have been ignored because they differed from forest management agency policy executive attitudes, or the basis of program funding. (Bradshaw, 1995.)

#### **2.10.1. Participation**

It is impossible to establish a universal definition of participation. There exists a conflicting range of interpretation which themselves reflect the dominant paradigm of development thinking. FAO (1978) stated different interpretations of participation. Participation to consider as a voluntary contribution by people to public programs supposed to contribute to a natural development but the people are not expected to take part in shaping the programs and their involvement in efforts to evaluate such programs. Participation may be defined as the process by which rural people are able to organize themselves and through their own organizations are able to identify their needs, share in decision making implementation and of participation action (FAO, 1978). Participation has been considered as a philosophy where people should have the right to demand their government to provide the policy framework, services and assistance necessary to help them meet their basic needs and solve their problems (Mohamed, 2000). Participation has been identified with political behavior such as voting and lobbying. However

participation means partnership. It includes exchange of knowledge and experience and it is not easy to achieve in practice.

### **2.10.2. The concept of people's participation**

Community participation refers to an active process where by the people influence the direction and execution of a development project. It requires an active involvement in decision making, implementation, benefit and monitoring and evaluation of the activities (FAO, 1998). The community participation is important because it facilitates the immediate fulfillment of the community needs. It enhances the sense of initiatives and independence among the local inhabitants. Furthermore community participation brings to light the significance of women's role in the development process and help them to build their self-confidence. Moreover, it gives the people the necessary respect of their experience as well as the democratic expression of needs and means (FAO, 1998). The era of social forestry projects and programs brought with it a need for extension services. Traditionally, interactions between forests and rural populations have been limited to protection, policy and revenue collection. Thus the art of encouraging peoples participation in forestry activities i.e. social forestry, is new to forests (Falconer, 1987)

The concept of participation has been subjected to lengthy debates e.g. its historical origin, its theoretical and its practical applicability (Bochet, 1983). Various studies have expressed the term in different meanings:

- Participation is involvement of people or communities on their free will or voluntarily in recognizing their problems and getting them to find solutions to these problems (Granholm, 1991).
- Participation may simply be defined as having a role to play in some activities. The role has to be active, tangible and have influence on the direct outcome or end result of activity (Mlenge, 1991).
- Participation is the voluntary contribution by people in projects, but without their taking part in decision- making (Bochet, 1983)

- Participation means taking part in activity. It actually involves taking part physically (being present; using one's mechanical efforts and skills and labor commitment), mentally, (conceptualization of the activity, decision-making, using mental skills in the organization, management of the activity etc...) and emotionally (assuming power, responsibility, and authority over the activity) in the process of the activity (Mlenge, 1991)
- Participation is a voluntary contribution that people share in establishment of community forestry (Granholt, 1991).

The word participation is widely used at present in project terminology, becoming very popular among the donors, government, consultants and international agencies but not clear among the rural population, who will be affected by the projects. In many cases the proposed programs are hardly accepted by aid agencies unless the involvement of people is guaranteed (Astorga, 1990; Gebre, 1990).

### **2.10.3. Local institutional development and participation**

The organization of the public sector forestry institutions and their locations in government structures have a significant influence on the types of forestry activities that are undertaken and, therefore influence the type and magnitude of local organizations' impacts in the sector. This has important implications in terms of the dynamics of forestry development and use of the sector's resource in given country and the nature of the benefits or impacts sought from the sector (Velay 1976).

The current debate on how to involve NGOs in forest development pays much more attention than in the past to the objectives underlying the involvement of such institutions. First, local level institutions have an important role to play in increasing the level of participation by target groups, and moving management responsibility closer to the resource base. Second, local institutions, often encourage new directions in forest development, directions that are less likely to be identified by government agencies (FAO, 1993).

Involving local people's institutions, mobilizing their indigenous knowledge of forest and tree resource and giving precedence to their perspective on forestry problems, has implications in terms of empowerment of local people. Encouraging them through their institutions to initiate as well as undertake forestry activities leads to possibility of their redefining the scope and goals of those activities and the long-term use of the forest resource being developed. This, of course influences directly the nature and distribution of the impacts from forestry project investments (Gregersen, 1993).

However, there is a need for support by public administration and technical forest agencies. On the one hand, agencies must change the skill base of their personnel to provide new services: training of local people in new technologies and resource management as well as organizational and decision-making skill. On the other, the government must identify correct policies and regulations that undermine the freedom and incentives of local people and local institutions to direct and undertake activities. One area is rules and regulations regarding tree growing, forest management, and product extraction and use. Another area is legislation underlying land and forest tenure. A third regards channeling of financial resources to governmental and non-governmental bodies and then local people. A fourth relates to giving people the ability to organize and then to recognize those organizations (FAO, 1993).

There is only a spotty understanding of the mechanisms and conditions which result in effective institutional development for forest management, development, and use. In principle local institutions must have a dynamic rather than passive relationship with forest resource management-initiating activities and shaping direction and decisions rather than simply implementing government objectives and programmes (FAO 1993). The development of dynamic local institutions is often risky. Local institutions may prove unable to undertake the activities or develop the organizational mechanism to sustain the activities. In addition, forestry activities can

generate other political forces out of tenure or resource use rights issues that run counter to a government's desired objectives and goals, also posing a threat to existing local power structure (Gregersen, 1993).

In forestry there are many institutional arrangements for local forestry development and/or management. These include:

- Joint management
- Allocation of usufruct rights areas, including protected areas, to indigenous people
- Providing forest development funds to the local administration and shifting the role of forest departments to providing extension advice to these local bodies;
- Providing community development fund to enable local communities to practice any form of sustainable resource management;
- Providing technical support to self regulating groups of users that collectively manage and use a common forest resource.

The above are all alternatives to privatization of forest development and resource management. The choice among these options again depends upon the context in a particular country and the nature of the resource base. Other local issues that have important implications for the development of appropriate organizations and institutional arrangement are; the dependence of marginal and marginalizing population on non-private land, government owned, but also open access and common property land; the constraints to women's involvement in forestry development in many societies (FAO, 1993). Institutional strengthening must include measures that increase women's involvement in forestry activities, that increase their participation in decision-making processes at local and higher levels, ensure their access to training and assets or tenure created, and that evaluate the appropriateness of participatory management arrangement for them (Gregersen, 1993)

#### **2.10.4. Major constraints of local participation**

Rural communities rarely have common interests to participate in activities related to forestry (Gebre, 1990). The differences in the socio-economic and physical structure of the villages affect the basis of community participation in Northern Sudan (COWI consult, 1993). The major constraints to participation as summarized by Falconer (1987) are as follows:

- Participants do not feel a pressing need for communal activities related to forestry
- Land availability
- Differing incentives for and perceived limitation of communal forest area
- Institutional security over the right of access to tree products
- A history of negative legislation with forest services
- Inequalities within the local social structure or mistrusts of local government
- The benefits accruing from forest plantations are long term benefits and environmental benefits, and
- labor availability

#### **2.11. Advantages and Disadvantages of the NGOs**

NGOs have so many advantages and at the same time have some disadvantages. the main advantages as listed by Asian Development Bank are; they have the ability to experiment freely with innovative approaches, they are flexible in adapting to local situations and responding to local needs, they enjoy good rapport with people and can render micro-assistance to very poor people, they communicate at all levels, and they are able to recruit both experts and highly motivated staff with fewer restrictions than the government.

while the disadvantages of NGOs are listed by the same source as: paternalistic attitudes restrict the degree of participation in project design, restricted/constrained ways of approach to a problem or area, reduced

reliability of an idea, relatively small project coverage, dependence on outside financial resources, etc., and "territorial possessiveness" of an area or project reduces cooperation between agencies, seen as threatening or competitive (Manila, 1991)



## CHAPTER III

### STUDY AREA

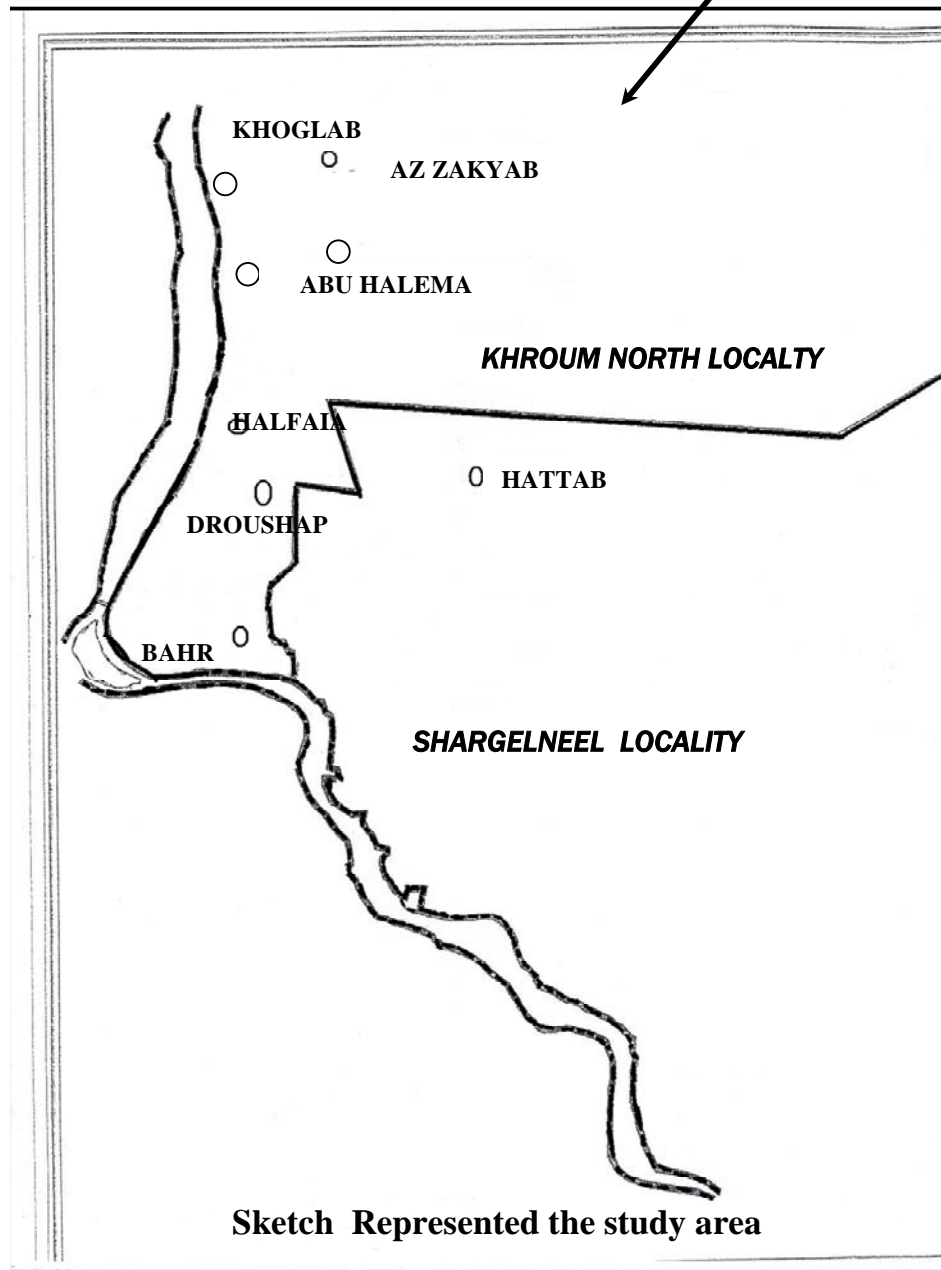
#### 3.1. Location

Khartoum State is one of 26 states comprising Sudan with an area of about 22000 km<sup>2</sup>, and with an estimated population of 6.65 million people growing at an alarming rate of about 7% per year (population census, 1993). The state occupies a strategic location, at the junction of the White Nile and Blue Nile, between Latitudes 15°:20' and 16°:20' N, and Longitudes range between 31°: 35' and 34°: 25' E.

Since 1984 the state has received 3 million migrants and displaced people due to famines and civil war. This uncontrolled urban growth has occurred at time of economic hardships, run-away inflation, rampant open and disguised unemployment, strict economic restructuring programmes, and an international development assistance that has been reduced to humanitarian, life-saving aid. The percentage of Khartoum state's population believed to be living below the poverty line is 70%. The national average is about 80%, however poverty outlook does not appear so grim due to strong solidarity and reciprocity relationships among households and communities, and utilization of a lot of coping mechanisms. The residential area in Khartoum has expanded at the expense of agricultural areas; natural trees cover and even green belt plantations. Table (2.1) shows the administrative structure of the study area.

**Table (2.1): Administrative structure and estimate of population (1998)**

| Unit          | Number of families | Male   | Female | Total population | Area km2 |
|---------------|--------------------|--------|--------|------------------|----------|
| Bahry         | 11.524             | 33.654 | 32.710 | 66.364           | 16.6     |
| Almokhtar     | 9.114              | 29.114 | 27.578 | 57.024           | 26.35    |
| Halfaia       | 8.637              | 28.906 | 26.036 | 54.947           | 36.22    |
| Droshab       | 9.205              | 32.068 | 29.803 | 61.871           | 167.8    |
| Silate        | 6.870              | 21.899 | 20.620 | 42.524           | 1259.5   |
| Nothern rural | 8.299              | 26.304 | 24.690 | 50.994           | 3052.6   |



Source Khartoum north locality 2003

### 3.2. Climate

The prevailing climate is semi-desert to dry. It is hot, dry and rainy during summer, cold dry in winter. Most of rainfall occurs during July and August. The annual rainfall is 75-160mm /year. The dry season reaches 8-10 months. According to Khartoum Metrological Station (1998), the daily average maximum temperature is 37.7°C while the daily average minimum temperature is 21.6°C, maximum temperature in summer exceeds 40°C, while the minimum temperature reaches 5.2°C in winter.

The daily evaporation rate according to the (Penman equation) is 7.7 mm and the highest rate takes place in April with average of 9.3mm. The daily mean of proportional humidity is 38 at 8 am and 21 at 2pm, while the mean of wind velocity 9 miles/hr before autumn. The area is known by wind storms (Haboub) that reaches 11 miles/hr.

### 3.3. Natural Vegetation

The whole area of Khartoum State falls in the semi- desert ecological zone. There are different kinds of indigenous trees growing wild in most of the state, that can be rehabilitated and managed properly, and their products can generate income for people in the urban areas. Satellite image of Khartoum conducted recently indicated that, the vegetation cover is sparse, total differences are primarily a function of varied soils. According to Harrison and Jackson (1958) the vegetation zone of khartoum State includes; *Acacia tortilis*- *Maerua crassifolia* Desert scrub which occupies more than 90% of the state area. *Acacia tortilis* is the dominant. In the extreme North West of the state a very small portion of semi- desert grassland on sand exists. Another very small portion of the state lying on the south east named semi-desert grassland on clay. Other tree species like *Salvadora persica* grows along seasonal courses in the semi-desert grassland and the woody species like *Acacia mellifera* show up along the drainage lines of seasonal shallow water courses. However, along the banks and sometimes the islands of the Blue Nile, and the River Nile the following woody species are found:

*Mareua crassifolia*, *Acacia radiana*, *Acaciamelifera*, *Ziziphusspina-christi*, *Acacial nilitica*, *Salvadora persica*, *Balanities aegyptiaca*.

The natural grazing area in the state is estimated at  $\pm 40\%$  of the total area. The natural grassland and forbs (Herbs) form about 75% of natural vegetation cover while the perennial grasses and shrubs/ trees form 5% and 20% respectively (Harrison and J.K. Jackson 1958)

### **3.4. Soil**

The northern part of the state is covered by the basement Complex. Most of this complex form granite rocks which resist the weathering. The Nile on a narrow strip form a recent deposits from El Faki Hashim passing trough Elgaili and Wad Ramli, also it covers Abu Delig area. The Nubian complex covers most of the state with different forms and liable to weathering forming the red gravel land. Due to the strong current of the Blue Nile, it eroded the Nubian sand stone forming the old and recent deposits. Many small khores, big wadis (Abu Hasheem and El Rawakeeb) and many hilly gravels and sand dunes are found in the western parts of the White Nile (Adom, 1975).

Nine categories of geomorphologic units of Khartoum State were identified by ELFadl (2000), these are; recent terraces, Gerf land and Nile Island, basin (Depressions of the Blue Nile, higher old terraces, fan plains of the old Blue Nile channels, mobile sand dunes, sloping deteriorated eroded plains, west of River Nile and White Nile and fan deposits, big and small wadis, and mountains and their surroundings

### **3.5. Land use**

The total area of Khartoum State is about 5 million Faddens and the total cultivable Landis 1.8 m fed. Only 0.6 million feddan (30%) is under cultivation, while about 0.4 million faddans are occupied by infrastructures (22%).

According to land –use pattern, the agricultural lands in Khartoum State can be classified as: - small farms (60%), cooperatives sector (25%) and large schemes 15% (71000 Fadden). Forests and rangelands cover an area of 2.3 million Feddans (45% of the geographical area of the state) and forests represent 25%. Major types of the tree species include; *capprais decidua* (tundub), *Acacia Ehrenbergiana* (Salam) *Acacia tortiis* (sayal). *Acacia sayal* (talh), *Ziziphus spinaChristi* (sidr), *Acacia mellifera* (kitr). *Acacia nilotca* (sunt) and *Balanites aegyptica* (Heglig).

### **Population of the state For year 56, 73, 83 and 99**

| Region   | 1956 |                  | 1973 |                     | 1983 |                  | 1999 |                  |
|----------|------|------------------|------|---------------------|------|------------------|------|------------------|
|          | %    | Population (000) | %    | Population on (000) | %    | Population (000) | %    | Population (000) |
| Sudan    |      | 102844           |      | 14114               |      | 20590            |      | 25635            |
| Khartoum | 4.9  | 503.936          | 7.8  | 1096                | 8.7  | 1802             | 13.7 | 3512             |

Source: Ministry of Finance and Economics. 1996.

### **3.6. Institutions involved in urban forestry in Khartoum State**

There are several institutions and NGOs engaged directly or indirectly with the vegetation cover in Khartoum state like;

- Forests National Corporation (FNC): It has the following objectives and function: to set up policies to fulfill and product the environment, to supervise the Sudan forests technically, and to carryout studies and develop necessary technical plans for forest inventory for their development
- Sudanese Environmental Conservation Society (SECS): The main objectives of SECS include: conservation of environment and mitigation of any action that may lead to environmental degradation, dissemination of environmental awareness, and cooperation with the government in law enforcement for environmental conservation
- Sudanese Social Forestry Society (SSFS): to enhance, the capacity of SSFS member and institutions to more effectively initiate, implement and manage

social forestry interventions, to extend, develop and update the data bank system in the field of environment and social forestry, and to improve linkages and communications with the appropriate national, regional and international bodies concerned with this aspect.

- Sudan Renewable Energy Project: The project of the USIAD funded “Sudan Renewable Energy Project” study and develop the use of cheap renewable energy sources and its technology, and to develop alternative sources of energy to be used in rural areas. The project has been concentrated on planting shelterbelts and woodlots within the selected agricultural schemes in Khartoum State.

- Fuel wood Development for Energy: Fuel wood development for Energy in Sudan (1984- 1995) Phase I- Phase III. The objectives of the programs is to develop alternative energy sources (stoves and other energy saving devices), intensification of forestry extension (school programmes, awareness campaigns and other activities).

- Sudan-Finland Afforestation programme (Khartoum fuelwood and shelterbelt project). The objective is to support the Sudanese researchers, so that the major part of the wood needed by the Khartoum area could be produced by the forests established in the Khartoum area, these forests also serving the purposes of shelter, recreation, introduction of afforestation methods and training of forestry students.

## **CHAPTER IV**

### **METHODOLOGY**

#### **4.1. Introduction**

This chapter includes description of the scope of the research, the target group, and sample selection. Moreover, the data collection instrument (questionnaire) is described in the forms of its construction, validity and field testing as well as the procedures and methods employed for data analysis.

The study was undertaken for the purpose of examining the role of local NGOs in adoption of strategies for the conservation of the environment and at the same time contributes to the resilience of local communities in the study area. In this study, two types of data were used to collect the necessary information, namely; primary data and secondary data. The source of the secondary data includes FNC documents, files, projects documents, and annual reports. The primary data were principally collected to investigate the level of participation of local communities in these local NGOs and the level of activities conducted by these NGOs. More specifically, the data covers the main items of the objectives of the study mentioned in chapter I.

#### **4.2. Selection of the study area**

The criterion used for the selection of the study area is based on the existence of more than one of the local NGOs, existence of activities conducted by the local organizations and existence of a reasonable membership. All the above-mentioned criteria were found in Khartoum North Province, accordingly the province was selected for this research.

The sampling technique used in this research is simple random sampling. Selection of sites within the locality was done according to the availability of activities launched by NGOs in the study area. Alhafai, Droshab and Bahri administrative units were selected to represent the study area. The selection

of the households was made randomly, where 80 respondents were selected from each administrative unit.

#### **4.3. Construction of the questionnaire**

The Construction of the questionnaire was made according to the guidance of FAO (1985). The suggestions of the supervisor as well as ideas of other experts in the field of study helped to reach the final format of the questionnaire.

The following guidelines of Burchinal (1989) were also given special consideration in the construction of the questionnaire:

- To be certain that each question was relevant to the topic and necessary.
- To ask the questions that the respondents can and are willing to answer.
- To express each question as simply as possible.
- State questions in specific concrete terms.
- To obtain criticism of all prepared items by a colleague or friend.
- State the items in the language respondent's use in every day conversation.

Two types of questions were used in the questionnaire. Closed- end questions, with mostly multiple choices or yes and no style of answer, and dichotomous questions in step- wise style, each answer leading to a specific set of follow up questions with no open. Ended questions except where it is inevitable.

These types of questions were used in the questionnaire in order to:

- Make the least demand upon respondents.
- Permit quick, efficient collection of data.
- Permit easy, quick and accurate analysis of answers.
- The combination of question and associated response categories sometimes help respondents to understand the questions more clearly.
- They are more useful in obtaining answers to sensitive questions.
- The difficulty of constructing questions at the proper level of generality.
- Responses are difficult to analyze and summarize.



- They may impose considerable burdens on respondents and interviewees.
- They are more likely to produce irrelevant and worthless data.

#### **4.4. Organization of data**

The conceptualization step was followed by the organization of the questions. The following guidelines were considered:

- To begin with simple, easy to answer questions.
- To place sensitive or more complex questions late in the questionnaire.
- Where it makes sense, to place the items in logical order.
- To try to create an interesting mix of items within the questionnaire.

An introduction was set to the questionnaire at the top of the first page or face sheet of the questionnaire, the introduction was written in short, simple sentences in the local language used by the respondents and in words they understand. The introduction was composed of the following elements:

- Identification of the person conducting the research.
- Explanation of the purpose of the study and why it is important.
- Explanation of how the respondents were selected.
- Assurance that answers would be protected and not made known to any one else to assure confidentiality.

#### **4.5. Pre- testing**

The formulation of the questionnaire was followed by a pre-test step to discover and correct any flaws in it. The purpose of the pre- test is to make sure that the questionnaire would deliver reliable and valid data for answering the problem under investigation. The final year students of faculty of forestry, university of Khartoum, as a part of their study course, were asked to critique the questionnaire, and to estimate how the respondents will be able to respond to the questionnaire. According to the comments of the students, the draft questionnaire was revised. Finally, the supervisor checked the

questionnaire and accordingly, some questions were removed. After the pre-testing the contents of the questionnaire were materialized into simple forms with minimum items to obtain necessary information. The questionnaire was finally revised and printed (Annex1).

#### **4.6. Statistical analysis**

The statistical analysis commenced through exploratory manipulations of the data obtained in the study area. This process was accomplished by critically examining the data through the use of simple techniques of analysis. The main tools are the construction of simple tables and selected cross- tabulation which allows tentative answers to many of the questions being asked in the survey.

## CHAPTER V

### RESULTS

#### 5.1. General characteristics of respondents

##### 5.1.1. Educational level

The educational level is an important indicator for community development. Harrison (1987) showed that forestry activities for rural development needed to be directed by respectful, literate people and with enough experience and knowledge. In addition literate people are ready to accept changes in perception, attitude and adoption of new innovations related to development of their communities if these changes were built on scientific basis. Moreover, age groups have similar importance. In this research, three age groups were formulated to represent youth (15 – 30 years), mature (31 – 45 years) and old respondents (more than 46 years). Table (5.1) shows the distribution of the respondents in the study area with respect to gender and the educational level.

**Table (5.1): Gender and education level:**

| Age   | No  | Gender |        | Education level |             |           |            |
|-------|-----|--------|--------|-----------------|-------------|-----------|------------|
|       |     | Male   | Female | Khalwa          | Priliminary | Secondary | University |
| 15-30 | 150 | 84     | 16     | -               | 8           | 30        | 62         |
| 31-45 | 60  | 85     | 15     | 5               | 20          | 30        | 45         |
| >45   | 30  | 100    | 0      | 10              | 20          | 30        | 40         |
| Total | 240 | 86.3   | 13.7   | 2.5             | 12.5        | 30        | 55         |

The percentages of respondents who enrolled/enrolling education to university level education is relatively high (55%). This finding could be verified by the fact that the study area receives high considerations with respect to public services among which schools. The percentage of respondents who follow formal education to high secondary level is ranked second after the university education as asserted by 30% of the respondents. The most important finding from the above table is the fact that 30% of respondents of age group 31 -45 years, and similar percentage of age group more than forty five ceased their education after the high secondary level.

Several factors may attribute to this finding; the first is the preference of job opportunities rather than following education particularly for the males. Under the light of limited income generation, males prefer to seek for jobs of good or satisfactory return rather than following their education. It is worth mentioning that the salaries offered to university graduates at government posts is relatively low compared to the private and marginal sectors. Respondents have not met any difficulties to enrol their education at the different levels compared to the other parts of the country which are known as marginalized areas. The khalwa education in the study area seems to be fading away, none of the respondents of the age group less than thirty-one years ceased his education at the khalwa level. In the other age groups the percentage of respondents who had khalwa education increases with the advance of age.

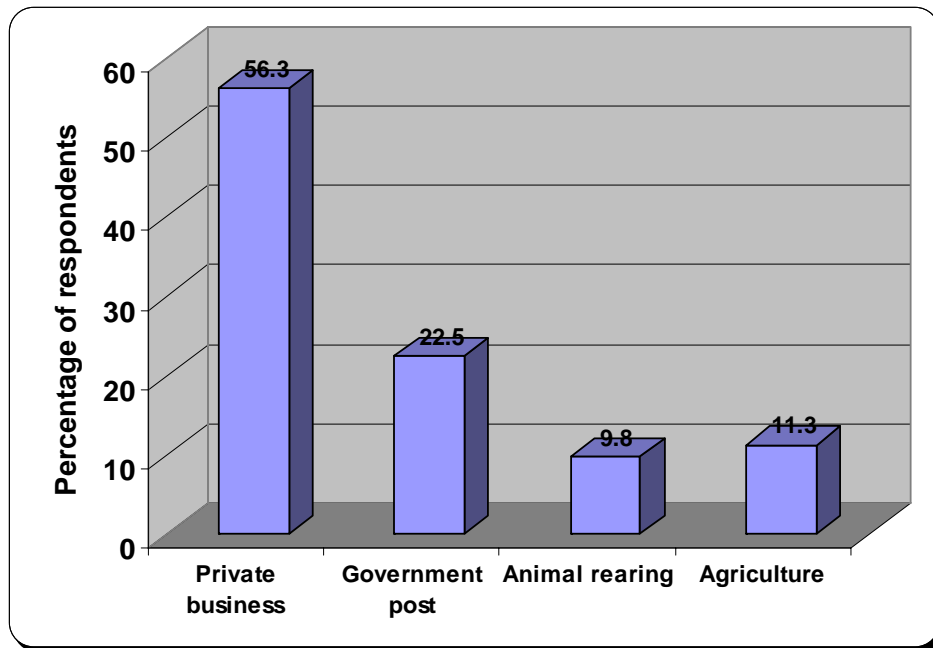
As far as gender issue is concerned, the majority of the respondents are males (86.3%) and the rest are females (13.7%). The justification of this distribution is attributed to the times during which the course of data collection took place. The team of data collection managed to collect the data at the afternoon to guarantee the availability of the head of household. Accordingly the men used to respond to the interview. Under certain circumstances like unavailability of the head of the household, women had taken the role of responding to the interview.

#### **5.1.2. Source of income**

Throughout the study area sources of income are confined to two main activities, namely; private business and government post. There are some other minor activities of income generation. Fig (5.1) furnishes the main findings of income generation in the study area. The majority of the respondents (56.3%) rely on private business for income generation. Several businesses were mentioned by the respondents like trading, carpentry, blacksmith etc., while 22.5% of the respondents are enrolled in government posts. These findings clearly reflect the preference of the private business

over the government posts. It also can be interpreted other way around by showing the difficulty of attaining government posts because of the scarcity of the government posts and its complications where it is linked with the exemption of the military services and political alliance.

**Fig. (5.1): Source of income of the interviewed sample**



Reliance on agriculture as a source of income was mentioned by 11.3% of the respondents. It is worth mentioning that in the study area there are many private farms both for agricultural crops and poultry production. El Silait project stretches across the study area offering good job opportunities for the local people in the outskirt of the capital. Some respondents (9.8%) mentioned that they rely on animal production for income generation.

### **5.1.3. Types of Activities executed by the organizations in the study area**

The documents of the two local non governmental organizations (SSEC& NNA) show that some activities are conducted in the study area like planning, protection trees and stoves. The respondents were interrogated about the types of activities run by the local NGOs and how they were recruited in theses activities.

**Table (5.2): Types Activities knowledge**

| Age   | No  | Activities | Channel knowledge Activities |              | Types of Society Activities |       |
|-------|-----|------------|------------------------------|--------------|-----------------------------|-------|
|       |     | Yes        | Through the media            | NGOs members | Planting                    | Other |
| 15-30 | 150 | 22         | 45                           | 54.5         | 72.7                        | 21.3  |
| 31-45 | 60  | 15         | 33.3                         | 66.6         | 66.7                        | 33.3  |
| >45   | 30  | 40         | -                            | 100          | 50                          | 50    |
| Total | 240 | 22.5       | 33.3                         | 66.7         | 66.7                        | 33.3  |

Only 22.5% of the respondents realized that there are some activities run by the local NGOs in the study area, while the bulk of respondents (77.5%) were not acquainted with any activity made by the local NGOs. Considering the category of respondents who witnessed the existence of activities conducted by the Local NGOs, 33.3% of the respondents mentioned that they knew about the activities of the NGOs in the study area through the mass media (press, TV and radio), while 66.7% clarified that they were informed about the activities from the members of the NGOs.

The bulk of the respondents (66.7%) who are knowledgeable about the activities of the NGOs emphasized that all the activities are dealing with tree planting programs (trees at farms, house yard and streets planting), while the rest of the respondents (33.3%) mentioned other fields of activities covered by the Local NGOs.

#### **5.1.4. Participation of the local peoples in the activities of the NGOs**

The word participation is widely used at present in project terminology, becoming very popular among the donors, governments, consultants and international agencies but not clear among the rural population, who will be affected by the projects. In many cases the proposed programs, are hardly accepted by aid agencies unless the involvement of people is guaranteed (Astorga, 1990; Gebre, 1990). Table (5.3) shows the participation of local people in the activities of the NGOs.

A considerable proportion of the respondents (22.7%) who are acquainted with the activities of the NGOs participated actively in the activities and some of them participated after hesitation as claimed by 21.3% of the respondents. For the later group, some factors 29.4% were mentioned by the respondents like misunderstanding of the role of the NGOs and lack of financial capability which restrict the active participation of the local communities.

**Table (5.3): Participation of local people in the activities of NGOs**

| Education level | No  | Participation    | Reasons behind low participation | Types of activities |                    |              |
|-----------------|-----|------------------|----------------------------------|---------------------|--------------------|--------------|
|                 |     | After hesitation | Misconceptions and lack of fund  | Tree planting       | Environment Health | Kindergarten |
| Khalwa          | 6   | 0                | 0                                | 0                   | 0                  | 0            |
| Primary         | 30  | 20               | 50                               | 100                 | 50                 | 0            |
| Secondary       | 72  | 20.8             | 0                                | 40                  | 40                 | 20           |
| University      | 132 | 22.7             | 40                               | 40                  | 10                 | 10           |
| Total           | 240 | 21.3             | 29.4                             | 47                  | 23.5               | 11.8         |

As mentioned earlier, the bulk of the respondents (47%) emphasized that the NGOs focuses on tree planting programs, the other activities covered by the organizations are dealing with the healthy environment as asserted by 23.5% of the respondents, and some mentioned coordination and establishment of kindergartens as mentioned by 11.8% of the respondents.

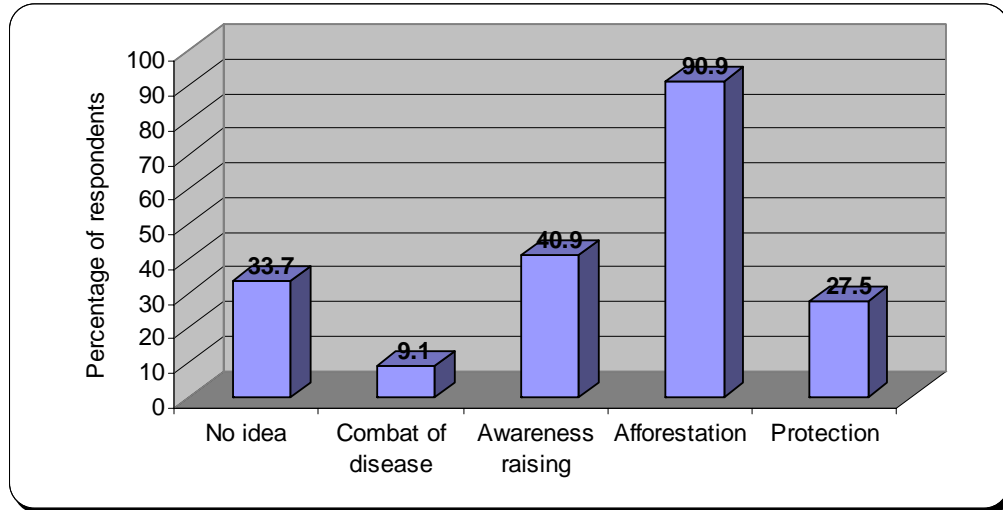
#### **5.1. 5. Objectives of the association**

Organizations, in general and in forestry in particular, work according to pre-stated objectives formulated during the planning phases. The objectives should aim at transforming the local people into a dynamic citizen capable of contributing to a large range of activities particularly the management of their resources (Papastavrou, 1984). Accordingly, the local people should be aware and knowledgeable with the objectives. Fig (5.2) reveals the views of the respondents about the objectives of the Local NGOs.

90.9% of the interviewed sample believe that the broad objectives of these local organizations is to launch an intensive a fforestation program in the

state, while 27.5% mention protection and conservation of the surrounding environment.

**Fig (5.2): Objectives of the association**



Some respondents (40.9%) believe that the sole objective of the local NGOs is to raise the awareness of the local people and 9.1% mentioned mitigation of diseases particularly malaria as one of the objectives of the organizations. Amazingly, a considerable proportion of the respondents (33.7%) mentioned that they have no clear idea about the objectives of these organizations although some of them know the different activities of these organizations.

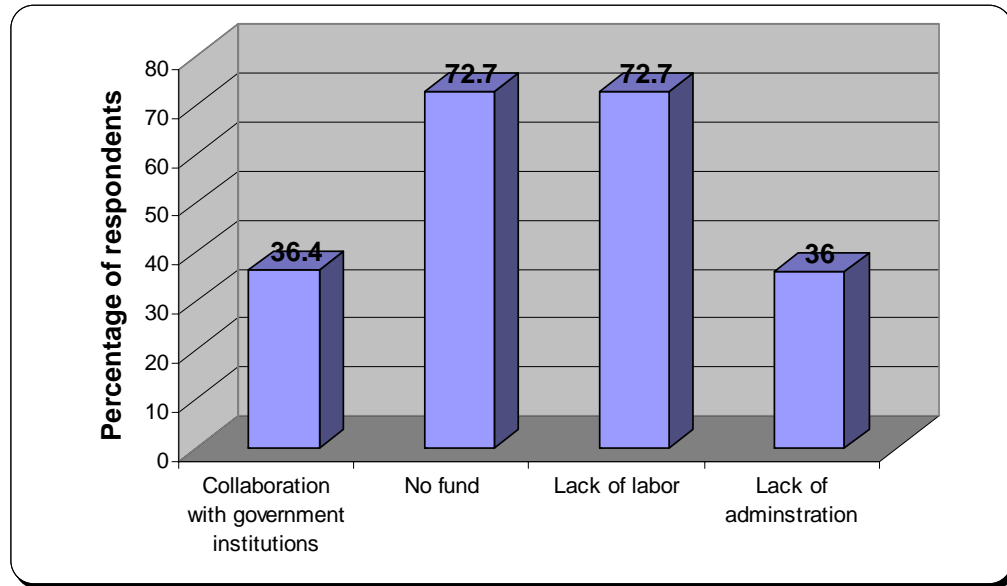
#### **5.1.6 The achievements of the objectives and their sustainability**

In community forestry, which is a new-people oriented policy, objectives should involve the rural dwellers in decision-making processes of all activities that affect their existence and raise the standard of their living in equilibrium with the environment. The objectives should aim at transforming the local people into a dynamic citizen capable of contributing to a large range of activities particularly the management of their resources (Papostavru, 1984). Regarding the activities launched by the local NGOs, 13.8% of the respondents stated that these activities are consistent with the objectives of the organizations. The rest of respondents 8.9% mentioned that, the activities lag far behind the stated objectives. Fig (5.3) the members of this group



mentioned several factors behind the lack of attainment of the prestated objectives.

**Fig (5.3): Factors confronting activities of organizations**



The main reason behind the failure of the activities is attributed to the lack of genuine participation. This fact is supported by 72.7% of the interviewed sample (lack of labor). A similar percentage attributes the failure to the lack of fund to guarantee the sustainability and replication of the activities in the study area. Some respondents (36%) attribute the failure of activities to the lack of a clear administrative body to supervise and patrol the executed activities. 36.4% of the interviewed sample attributes the failure of the organizations activities to lack of coordination between these organizations and the governmental bodies.

#### **5.1.7. Perception of participation in local NGOs activities**

Participation recognizes people's central role in directing their own lives. Rural communities rarely have common interests to participate in activities related to forestry (Gebre, 1990). Generally, only 12.5% of the interviewed sample is members in the organizations. Table (5.4) shows that the perceptions of the respondent about the concept of participation encompassed

many ambiguities. For some respondents the participation in the organizations activities is due to tradition (working party) i.e. when you see your friend or a relative doing something you join him spontaneously. For some other respondents (12.5%), participation is coupled with political affiliations. If the group is anti to your political profile you should not participate. All the members of this group are members of old age. 50% of the interviewed sample link genuine participation with salaries, none of this group is from older group.

**Table (5.4): Traditional and participation gender in the study area**

| Age   | No  | Traditions | Reasons behind week participation |         |                    | participation gender |               |
|-------|-----|------------|-----------------------------------|---------|--------------------|----------------------|---------------|
|       |     | Yes        | Political affiliation             | No fund | Limited membership | Gender participation | Women and men |
| 15-30 | 150 | 8          | -                                 | 75      | 0                  | 20                   | 64            |
| 31-45 | 60  | 10         | -                                 | 50      | 50                 | 25                   | 55            |
| >45   | 30  | 10         | 100                               | 0       | 0                  | 10                   | 90            |
| Total | 240 | 8.8        | 12.5                              | 50      | 12.5               | 20                   | 65            |

Although women can, and should play strong role in development, this is not always easy, and there are still constraints that confront their full participation in communal work particularly in the rural areas. In the study area 20% of the respondents believe that there are constraints confronting the participation of women in the local NGOs activities, the rest of the respondents (2.7%) have no reservation in women participation. This finding is supported by 65% of the respondents who prefer the participation of women and men side by side in the different activities.

#### **5.1.8. Dissemination of information and arrangement of activities**

Extension is an information education process which aims to transfer knowledge and skills through the change of attitudes for sustainable livelihood of clients. There are different methods of extension (individual, group and mass media); the reliance on any of the three or the combinations of the three is determined by availability of infrastructure and necessary fund to perform the task. In the study area the Local NGOs used different methods

for mobilizing and sensitizing the local communities in their activities. Table (5.5) shows the methods used by the organizations.

**Table (5.5): Exchange of information and arrangement of activities**

| Age   | No  | Mass media |            | Group extension method |          | Arrangements of activities |                  |
|-------|-----|------------|------------|------------------------|----------|----------------------------|------------------|
|       |     | Press      | Mass media | Group discussion       | Meetings | Organization               | Physical fitness |
| 15-30 | 150 | 100        | 100        | 50                     | 16       | 100                        | 14               |
| 31-45 | 60  | 100        | 50         | 50                     | 15       | 0                          | 10               |
| >45   | 30  | 33.3       | 33.3       | 33.3                   | 40       | 0                          | 0                |
| Total | 240 | 71         | 57         | 42.9                   | 18.8     | 28.5                       | 11.3             |

From the above table, the organizations rely on two methods, mass media and group extension method. 57% of the respondents mentioned that the organizations rely on the TV and radio for the dissemination of information to the clients, and 71% claimed that the organization rely on the press, mainly newspaper, for the dissemination of information. Only two types of methods are used as group extension method, namely, meetings and group discussions as mentioned by 18.8 and 42.9% of the respondents, respectively.

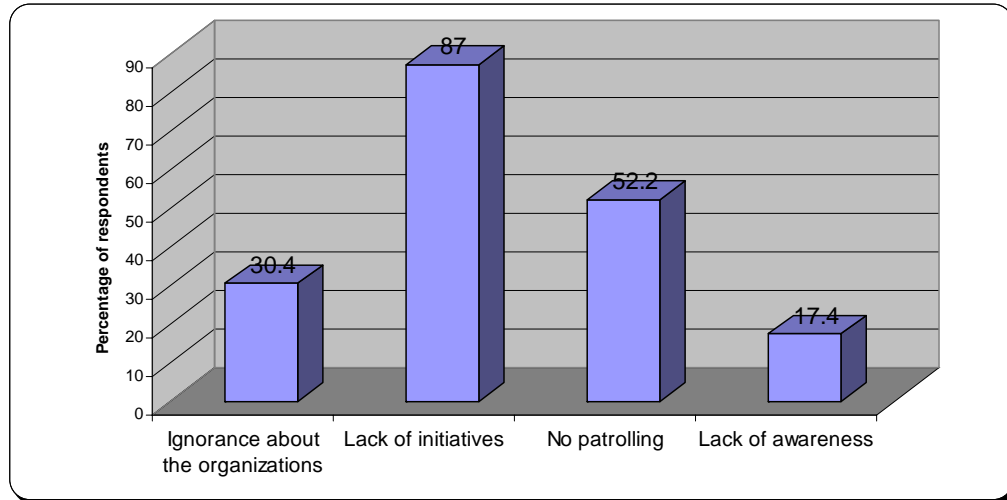
For the organization of the activities and distribution of responsibilities, 18.8% of the respondents mentioned that the arrangements of activities are made in the meetings. The meeting channel is used for both dissemination of information and organization of the different activities. This emphasizes the importance of meetings as a contact group method. The meetings have significant importance since it offers the chance for open and free discussion between the local people and the extensionists. The other methods of arrangement of activities are according to physical ability and willingness and organization of volunteers in smaller groups as indicated by 11.3% and 28.5% of the respondents, respectively.

#### **5.1.9. Extension**

Extension is defined as informal education process for the dissemination of information from research stations to the farmers (Mohamed, 1995). In the study area 28.8% of the respondents appreciate the role of the extension

services provided by the local NGOs, the rest of the respondents 71.2% are not satisfied with the extension services Fig (5.4)

**Fig (5.4): Constraints confronting extension services in the study area**



Several reasons were mentioned by the respondents about their lack of satisfactions about the extension services. 87% of the interviewed sample mentioned that the extension services lack initiatives, have no clear plans and their actions come as a reaction to certain events. 52.2% mentioned that the extension units have no paraextensionist to patrol and monitor the ongoing of the different activities executed in the area, while 17.4% mentioned that the efforts exerted by the organizations are not enough to raise the awareness of the local people. Some respondents 30.4% mentioned that they have no idea about the local NGOs and the extension services they provide.

#### **5.1.10. Times of visits**

Meetings are a vital method in the process of dissemination of information particularly in the rural areas where illiteracy level is very high. It is a suitable means for having direct contact and communication between the clients and the source of extension. Moreover, meetings offer the chance for revealing any ambiguities or mistrust in the perception of the local people. Table (5.6) shows the time at which the organizations used to organize the meetings with the local people. The majority of the respondents (73%)

asserted that the organizations tend to organize the meetings at the evenings. Usually the meetings are organized in common places like schools, clubs, and mosque or play yards as claimed by the respondents.

**Table (5.6): Times of meetings**

| Age   | No  | Organization of meetings |            | Suitability of time | Period of meetings |         |
|-------|-----|--------------------------|------------|---------------------|--------------------|---------|
|       |     | Sporadic                 | Systematic |                     | Afternoon          | Evening |
| 15-30 | 150 | 90                       | 10         | 30                  | 33.3               | 66.7    |
| 31-45 | 60  | 100                      | 0          | 25                  | -                  | 100     |
| >45   | 30  | 100                      | 0          | 60                  | 40                 | 60      |
| Total | 240 | 93.7                     | 6.3        | 32.6                | 27                 | 73      |

Some respondents (27%) clarified that meetings are organized at afternoons. From the above findings it is clear that the organizations used to organize meetings at times not coinciding with the routine daily working hours. However, 32.6% of the respondents mentioned that the time of meetings is suitable. Moreover, the organization of meetings is not taking place on a systematic manner as claimed by 6.3% of the respondents. The majority of the respondents 93.7% asserted that the meetings are sporadic in nature and sometimes the respondents are informed in the same day of the meeting.

#### **5.1.11. Incentives and times of execution of activities**

The agenda of incentives and subsidies is usually addressed in development programs to help in sensitizing and mobilizing local communities to adopt new interventions. In the study area the local NGOs used to address the issue of incentives in the execution of its activities. Table (5.7) shows the types of incentives introduced by the organizations which usually takes the form of simple inputs.

**Table (5.7): Inputs and times of execution of organizations activities**

| Age   | No  | Inputs |           |        | Execution activities |         |           |
|-------|-----|--------|-----------|--------|----------------------|---------|-----------|
|       |     | Labor  | Seedlings | Others | Leisure times        | Evening | Vacations |
| 15-30 | 150 | 46     | 36        | 44     | 24                   | 16      | 10        |
| 31-45 | 60  | 35     | 35        | 30     | 30                   | 20      | 5         |
| >45   | 30  | 30     | 30        | 40     | 30                   | 40      | 20        |
| Total | 240 | 41.3   | 35        | 40     | 26.3                 | 20      | 10        |

The worked any activity necessitates the active participation of the community members in all the processes. The strategy of the organization is to rely on the local people for the provision of unpaid labor. This fact was supported by 41.3% of the respondents, while 35% of the respondents stated that the organizations provide simple inputs (seedlings and simple tools). Some respondents (40%) stated other assistance provided by the organizations like assistance in the protection of the seedling, extension services and provision of water for the irrigation of some sites.

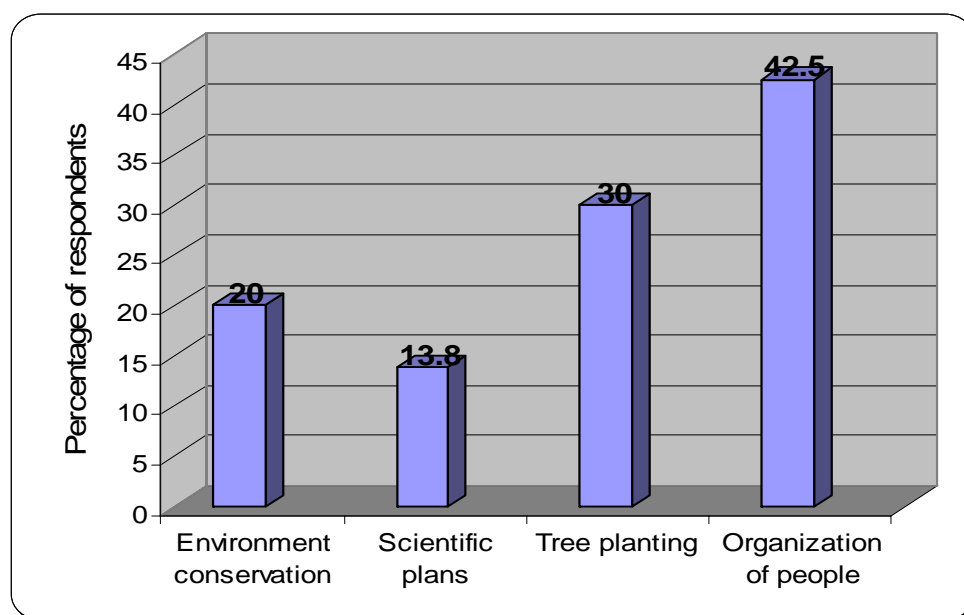
The times of execution of different activities varies considerably between the respondents. Some respondents (26.3%) asserted that they participate in the activities of the organizations during their leisure time, while 20% claimed that they participate during evenings. Ten per cent of the interviewed sample mentioned the vacations as good opportunity for the execution of the different activities.

#### **5.1.12. Perceptions of the role of the organization by the local people**

After the government initiatives to combat desertification and the international energy crisis, Sudan become a focal point for many NGOs for the sake of finding possible solutions to these problems through involvement of local communities (DECARP, 1976). Most of these NGOs failed to fulfill their stated objectives. Despite the lack of tangible benefits these NGOs continued to work in the country until the political decision of enforcement of economical boycott and sanctions on Sudan. The outcome of this phase-out gave rise to local NGOs for sake of playing the same role of the NGOs. Fig (5.5) illustrates the role of local NGOs.

Thirty per cent of the respondents realized that one of the roles of the local NGOs is to rehabilitate the tree cover in the state. Some respondents (42.5%) believe that the main role of these organizations is to organize local communities to guarantee the sustainability of adopted interventions.

**Fig (5.5): The role of local organizations**



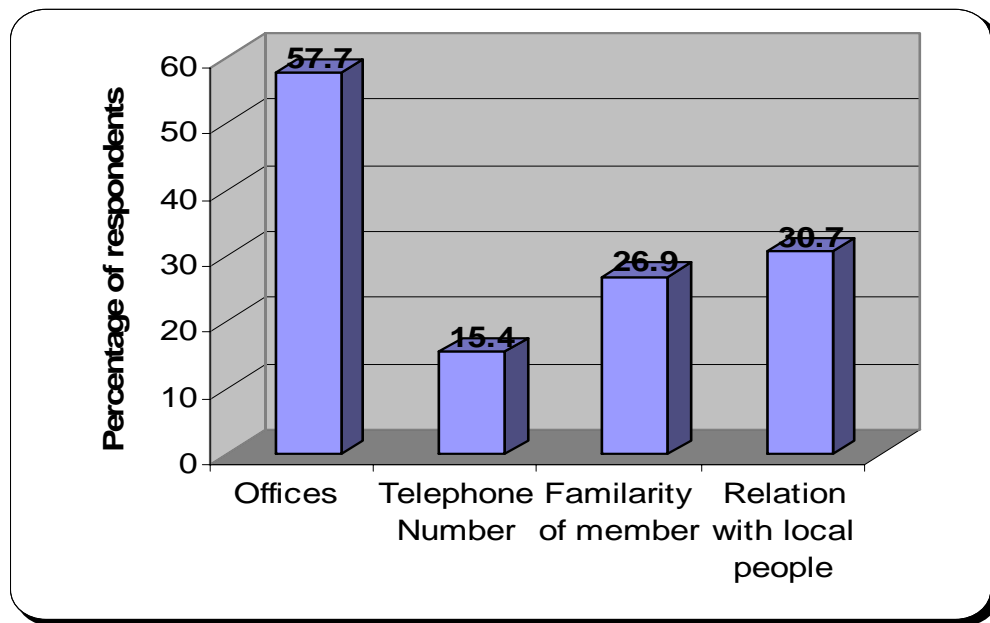
Twenty per cent of the interviewed sample mentioned activities of mitigating irrational uses of natural resources and adoption of activities that reduce reliance on the natural resources as the main task of the local NGOs. Some respondents (13.8%) believe that the main role of the Local NGOs is to formulate scientific plans for the better management of the natural resources.

#### **5.1.13. Relationship between Local NGOs and local people**

The participation process required high coordination between participants and the local NGOs. In the field of rural development there are different types of relations that explore the relationship between the local people and outsiders. Power relationship is one of the important aspects of participation. Davis-case (1990).Fig (5.6) explored the relation in the existence of two parties involved in any development works; the “insiders” or the target groups of the local people and “outsiders” like implementers or donors. This implies a situation of a win/ loses force, which creates two types of power; either power within (share) or power over and no power. The latter is the most common power relationship in development work.

To explore the relationship between the local people and the organizations the researcher managed to highlight the communication between the two sides and familiarity of the organizations members by the local people. 30.7% of the interviewed sample asserted that they have direct relationship with the members of the organizations. This low percentage reflects the weakness of the relationship between the local people and associations. FAO (1986) stressed the importance of collaboration between the local people and the outsiders. Forestry extension programs can not proceed without due regard to other rural development programs and the local communities in the area. Only 26.9% of the respondents are members in the associations. This low percentage reflects the failure of the organizations to recruit the local people and involve them in the activities that contribute to their wellbeing and to the environment.

**Fig (5.6): Relationship between the local people and the associations**



Therefore, it is logic to find that the relationship between the local people and the association is weak. This finding is supported by the ignorance of the local people about the locations of the organization centres where only 57.7% of the respondents know exactly the locations (offices) of the association, and only 15.4% of the respondents know the telephone number of the



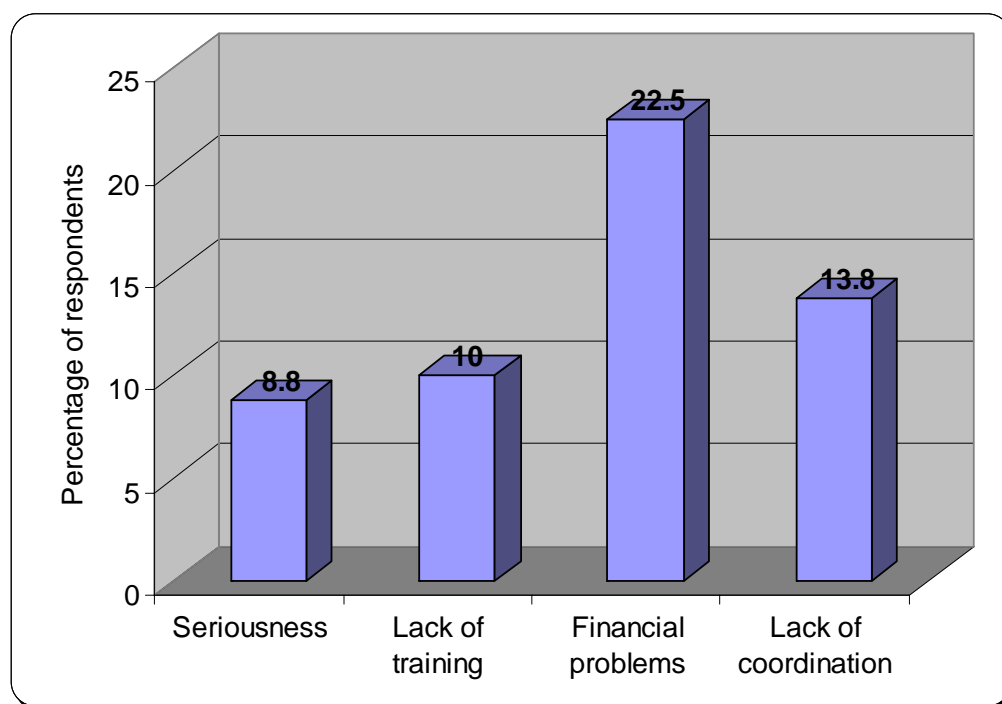
associations. One of the pitfalls of the associations is the lack of paraextensionist at the study area to facilitate communication between the local people and the associations. Existence of paraextensionist is a key role in mobilizing the local people for the achievements of rural development objectives.

#### **5.1.14. Constraints to people's participation in study area**

Rural development projects and programs are complicated dynamic processes confronted by obstacles at any phase of the process. In the study area the local NGOs are confronted by several factors that endanger the sustainability of the activities. Rural communities rarely have common interests to participate in activities related to forestry the difference in the socio-economic of the villages affect the participation of local people in projects activities (COWIconsult, 1993). Fig (5.7) shows the different constraints and measures of risks confronting the sustainability of the Local NGOs in the study area.

Lack of coordination between the organizations and the local people was mentioned by 13.8% of the respondents as the main constrain confronting the sustainability of the activities of the organizations in the study area. The respondents express the coordination in terms of recruitment of the local people through propaganda and encouragement of local people for participation. Ten per cent of the respondents stated that the lack of training sessions, which are missed in the study area, is the most serious factor that guarantees the sustainability of the activities. Some respondents (22.5%) mentioned the lack of financial support restrict the replication of the activities introduced by the organizations at other sites, and 8.8% of the respondents are suspicious about the role of the Local NGOs and believe that the organizations are not serious and they have their own hidden agenda

**Fig (5.7): Constraints confronting people's participation in study area**



## **5.2. Members of the Local NGOs in the study area**

### **5.2.1. Age groups and gender**

Gender assessment studies can be useful as planning instrument to achieve the desired effects for women, leading to improvement in their positions and prospects of life. The sample of respondents consists of males and females. Table (5.8) shows some of the general characteristics of the members of the organizations. From the above mentioned table it is clear that the membership of the organization include different categories of the society; university students, high school students, government officials, teachers and others. Moreover, the gender issue is highly considered in the membership of the organizations. For this research the selected sample encompasses gender issue (62.1% males and 37.9% females). The involvement of the females in the membership of the organizations is well represented by the government officials and the students.

**Table (5.8): characteristics of the members of the organizations**

| Occupation           | No | Gender |        | Age   |        |      |
|----------------------|----|--------|--------|-------|--------|------|
|                      |    | Male   | Female | 30-15 | 45- 31 | >45  |
| University graduates | 12 | 100    | 0      | -     | 50     | 50   |
| Student              | 9  | 33.3   | 66.6   | 100   | -      | -    |
| Government officials | 6  | 50     | 50     | -     | 50     | 50   |
| Secondary teacher    | 6  | 100    | 0      | 50    | 50     | -    |
| Others               | 33 | 27     | 73     | 36.4  | 54.5   | 9.1  |
| Total                | 66 | 62.1   | 37.9   | 37.3  | 40.9   | 21.8 |

Moreover, the selected sample of the members of the organizations covers abroad ranges of age groups. The youth and mature group (15 – 45 years) represents the bulk of the selected sample (78.2%). The old people of age more than 45 years are represented by 21.8% of the respondents. The age group and the gender issue are among the most important variables which are given special consideration in the process of development (Chamber, 1986).

### **5.2.2. Society activities**

According to the members of the organizations, there are several activities executed by the organization in close collaboration with the local communities. Table (5.9) shows the different activities conducted by the Local NGOs organizations. The majority of the respondents (74.2%) stated that special attention is given to ecological awareness under the assumption that through fulfilling this objective, other objectives like rehabilitation of tree cover and rational use of natural resources can be achieved simultaneously. This may verify the intensive seminars and workshops organized by the Local NGOs. Afforestation was mentioned by 37.1% of the respondents as one of the priorities in the organizations activities, and 34.2% mentioned the use of energy substitutes (improved cooking stoves) to reduce reliance on the tree cover. Adoption of activities that lead to the conservation of the environment was mentioned by 27.6 % of the respondents.

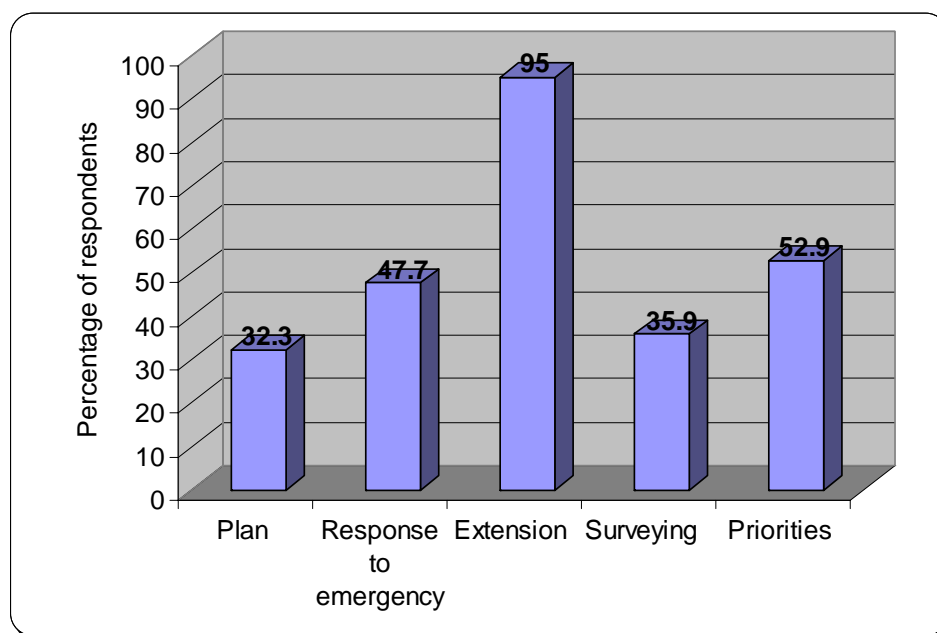
**Table (5.9): Activities introduced by the organizations in the study area**

| Occupation           | No | Ecological awareness | Support environment | Afforestation | Energy substitutes |
|----------------------|----|----------------------|---------------------|---------------|--------------------|
| University graduates | 12 | 50                   | -                   | 25            | 50                 |
| Secondary Students   | 9  | 66.7                 | 66.7                | 33.3          | 33.3               |
| Government official  | 6  | 100                  | -                   | 100           | -                  |
| Secondary teacher    | 6  | 100                  | 50                  | -             | -                  |
| Other                | 33 | 54.5                 | 54.5                | 27.3          | 54.5               |
| Total                | 66 | 74.2                 | 27.6                | 37.1          | 34.2               |

### 5.2.3. Selection of activities and sites of execution

The two local NGOs cover devastating areas of the country and have different branches at different states. According to the objectives of these organizations they are assumed to cover a wide spectrum of activities in the field of environment. Fig (5.8) shows the criteria on which the selection of the activity and sites for the implementation of the different activities is based.

**Fig (5.8): Execution and selection of activities**



The majority of the respondents (95%) asserted that the selection of the site and the type of the activity to be run is based on the decision of the extension unit, while 52.9% showed that the selection is based on the priority set

previously by the organizations. Some respondents (35.9%) assured that the selection is based on the results of survey made by the organizations at the different sites. This finding is consistent with the view of the other respondents who claimed that the selection is based on the priorities list of the organizations. Some respondents (32.3%) asserted that the selection is based on the annual plans made by the organizations, and 47.7% believe that the selection is based on the situation of the site (emergency cases). Appendixes (3 and 4) show the different activities conducted by the local NGOs.

#### **5.2.4. Participation in society activities**

Participation aims to develop sustainable resource management practice and it stresses the need for participation of local inhabitants in decision-making which affects them. According to Granholm (1991) there are three necessary elements when speaking about participation: people should be allowed to identify their problems, be allowed to find out the causes and roots of their problems, and be allowed to propose solutions to solve their problems. In the study area the members of the organizations evaluate the participation of the local communities in the activities of the organizations. Table (5.10)

**Table (5.10): Participation and level of adoption of the interventions**

| Occupation           | No | Types of participation |                   |       | Acceptability of activities |      |
|----------------------|----|------------------------|-------------------|-------|-----------------------------|------|
|                      |    | Simple inputs          | Financial support | other | High                        | Good |
| University graduates | 12 | 50                     | 25                | 25    | 25                          | 25   |
| Secondary student    | 9  | 66.7                   | -                 | 33.3  | 33.3                        | -    |
| Government officials | 6  | 50                     | 50                | -     | -                           | 100  |
| Secondary teacher    | 6  | 50                     | -                 | 50    | -                           | 50   |
| Others               | 33 | 72.7                   | 9.1               | 36.4  | 54.5                        | -    |
| Total                | 66 | 57.9                   | 16.8              | 28.9  | 22.6                        | 35   |

The participation of local communities in the activities of the organizations takes different forms. Some respondents beside their physical contribution they provide the necessary simple tools as claimed by 57.9% of the respondents. Some respondent (16.8%) participate through provision of financial support to the organizations, and 28.9% of the respondents showed

that the participation of the local people may take the forms of exchange of ideas and views about the types of activities and moral and emotional support.

As far as the acceptability of the activities of the organizations by the local people is concerned, 22.6% of the members of the organizations evaluate the activities of the organizations as highly accepted by local communities while 35% evaluate the participation as good. The rest of the respondents (42.4%) classified the participation of local communities as fair or poor.

### **5.2.5. Objectives of the association and strategy**

The deforestation and destruction of the vegetation cover, in recent decades to feed growing population could have devastating social, environmental and economic consequences. The local NGOs attempted to tackle the issue of mitigating the environmental deterioration through reducing reliance on natural resources for fuel and at the same time rehabilitate the degraded habitats. Table (5.11) illustrates objectives of the Local NGOs in the study area.

**Table (5.11): Objectives of Local NGOs as viewed by the members**

| Occupation           | No | Environment conservation | Awareness | Sustainable development | Rehabilitation of tree cover |
|----------------------|----|--------------------------|-----------|-------------------------|------------------------------|
| University graduates | 12 | 50                       | 75        | -                       | -                            |
| Secondary student    | 9  | 66.7                     | 66.7      | 66.7                    | 33.3                         |
| Government official  | 6  | 100                      | 50        | 50                      | 50                           |
| Secondary teacher    | 6  | 50                       | 100       | 50                      | -                            |
| Other                | 33 | 54.5                     | 90.9      | 54.5                    | 36.4                         |
| Total                | 66 | 64.2                     | 76.5      | 44.2                    | 23.9                         |

Some respondents (64.2%) stated that the broad objective of the local NGOs is the conservation of the environment through bridging the gap between the government and the local people, while 76.5% mentioned that the broad objective of the organizations is to raise the awareness of the local people. The two objectives are compatible and can be achieved simultaneously. Some respondents (23.9%) believe that the broad objective of the organizations is to guarantee sustainable services provided by the tree cover

while 44.2% believe that the objective of the association is rehabilitation of the environment.

#### **5.2.6. Evaluation and mechanism to achieve the objectives.**

The evaluation of the respondents of the objectives of the organizations varies considerably. Table (5.12) shows the perceptions of the members of the organization towards the stated objectives.

**Table (5.12): Evaluation of the objectives of the organizations by the members**

| Occupation           | No | Evaluation of objectives | Objectives of organizations |                     |                    |                 |
|----------------------|----|--------------------------|-----------------------------|---------------------|--------------------|-----------------|
|                      |    | Ambitions                | Awareness                   | Scientific research | Standard of living | Problem solving |
| University graduates | 12 | 100                      | 100                         | 50                  | 25                 | 50              |
| Secondary student    | 9  | 100                      | 33.3                        | 66.7                | -                  | 100             |
| Government official  | 6  | 100                      | -                           | 50                  | 50                 | 50              |
| Secondary teacher    | 6  | 100                      | 50                          | 50                  | 50                 | -               |
| Other                | 33 | 90.9                     | 36.4                        | 63.6                | 45.5               | 63.7            |
| Total                | 66 | 98.2                     | 43.9                        | 56.1                | 34.1               | 52.8            |

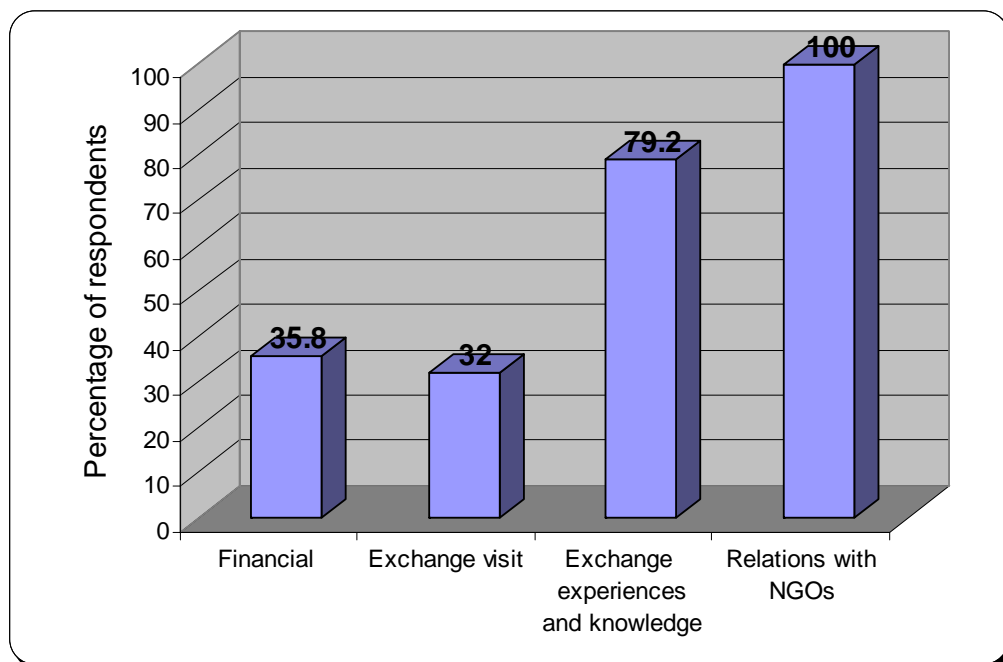
Unfortunately, almost all the respondents (98.2%) believe that the objectives of the organizations are ambitious objectives which can not be implemented on the ground. They attributed this fact to the lack of enough fund and infrastructure to convert the dream to reality. Therefore, the stated objectives will remain just as slogans. This fact is further supported by 43.9% of the respondents who claim the awareness raising is the only objective that can be achieved because it depends on the mass media and to a little extended on the meetings with the local people. Some respondents (56.1%) mentioned that the stated objectives of the organizations were not formulated according to the local people needs and priorities but based on research stations. Therefore, its acceptability by the local people remain risky, while 34.1% showed the difficulty of the participation of the local people because none of the objectives address the issue of raising the standard of living of the local people. Moreover, 52.8% of the respondents mentioned that these

organizations have not adopted the strategy of problem solving in which the organizations have to make a survey to identify the different problems that face the local communities and rank them according to priorities. This might justify the judgment of the majority of the members of the organization about the objective of the organization as fancy or ambitious.

### 5.2.7. Relationship between local NGOs and International NGOs

The entire interviewed sample of the members of the organizations asserted that, according to their knowledge, there are good relations with the international NGOs like Oxfam, Freidrich Albert, DED and others. Fig (5.9) shows the types of relationships between the local and international NGOs.

**Fig (5.9): Types of relationship with international NGOs**



The majority of the respondents (79.2%) mentioned that the relationship between the local and international NGOs is represented in the exchange of experiences and knowledge. This may take the form of joint projects as in the case of OXFAM or training sessions as in the case of Freidrich Albert. Thirty-two of the respondents showed that there are systematic visits and coordination with the international NGOs, while 35.8% showed that the



relation with the international NGOs takes the form of financial support for the implementation of activities in selected sites.

#### **5.2.8. Potentiality of local NGOs in gearing rural development**

The potentiality of the Local NGOs in mobilizing and sensitizing local communities to contribute to the development of their communities was investigated in this research. Table (5.13) furnishes the different channels through which the Local NGOs could contribute to the development of local communities.

**Table (5.13): Different channels for the development of local communities**

| Occupation           | No | Participation | Training | Subsidies | other |
|----------------------|----|---------------|----------|-----------|-------|
| University graduates | 12 | 100           | -        | -         | 25    |
| Secondary student    | 9  | 33.3          | -        | 33.3      | 33.3  |
| Government officials | 6  | 100           | -        | 50        | -     |
| Secondary teacher    | 6  | 50            | -        | 50        | -     |
| Others               | 33 | 54.5          | 9.1      | 27.3      | 18.2  |
| Total                | 66 | 67.6          | 1.8      | 32.1      | 15.3  |

Participation of local communities in the different activities introduced by the Local NGOs is a key factor for the success and sustainability of these activities as viewed by 67.6% of the members of the organizations, while 32.1% believe that addressing of the issue of incentives and subsidies will encourage the local people to participate effectively (genuine participation) and enhance the process of adoption of the different interventions. Few respondents (1.8%) believe through training of the local people the development of local communities could be guaranteed. This low percentage is attributed to the fact that the members of the organizations believe that since any one of the organization has large membership, there is no need for training sessions. Some respondents (15.3%) believe that there are numerous different methods through which the local NGOs with the collaboration of local communities can gear the development of local communities

### 5.2.9. Coordination between Local NGOs and government institutions

The local NGOs have relationship with government bodies as they have relational NGOs. Table (5-14) illustrates the different governmental institutions the local NGOs used to coordinate with for the execution of the different activities and the fields of coordination between the tow parties in

| Occupation           | No | Relation with government institutions | Coordination | Training | Kinds |
|----------------------|----|---------------------------------------|--------------|----------|-------|
| University graduates | 12 | 100                                   | 25           | 25       | 50    |
| Secondary student    | 9  | 100                                   | 50           | 25       | 25    |
| Government officials | 6  | 100                                   | -            | -        | -     |
| Secondary teacher    | 6  | 100                                   | -            | 50       | -     |
| Others               | 33 | 100                                   | 27.3         | -        | -     |
| Total                | 66 | 100                                   | 20.5         | 20       | 10    |

the selected sites.

The main government institutions the Local NGOs work with in a close coordination for the implementation of the different activities are; the Higher Council for Environment and Natural Resources (HCENR), Forests National Corporation and the Ministry of Agriculture and Forests

#### **Table (5.14): Relationship with government institution**

As far as the fields of relationship with government institutions are concerned, 20.5% of the respondents showed that the relation takes the form of coordination with the different bodies in the planning and implementation of the different activities, while 20% mentioned the contribution of the government institutions in the training sessions. Ten percent mentioned an assistant in kind (inputs) is one of the fields of coordination between the Local NGOs and the government institutions.

### 5.2.10. Trainings of the members of the Local NGOs

Training is an essential activity in any new community development process in order to achieve prescribed target and goals. The concept of training of the local inhabitants should be given priority in order to qualify the local inhabitants to be potentially capable of executing the adopted activities of any

programs. Training aims to create capacity building and to ensure the sustainability of the adopted interventions. Table (5.15) illustrates the level of training sessions to which the members of the organizations were subjected.

The majority of the members of the local NGOs (83.3%) showed that they were subjected to training sessions in different fields of environment and 52.1% had attended seminars and lectures organized by the Local NGOs at the study area. Some respondents 42.6% stated that they had the chance to attend several workshops organized by the Local NGOs.

**Table (5.15): Fields of training to the members of the Local NGOs**

| Occupation           | No | Training sessions | Seminars and lectures | Workshop |
|----------------------|----|-------------------|-----------------------|----------|
| University graduates | 12 | 100               | 50                    | 75       |
| Secondary students   | 9  | 66.7              | 33.3                  | 33.3     |
| Government official  | 6  | 100               | 100                   | -        |
| School teacher       | 6  | 50                | 50                    | 50       |
| Others               | 33 | 100               | 27.3                  | 54.6     |
| Total                | 66 | 83.3              | 52.1                  | 42.6     |

#### **5.2.11. Organization and finance of the Local NGOs**

The selected sample of the members of the Local NGOs was interrogated about the organizations of the work and the source of finance of the Local NGOs. Table (5.16) shows the financial supporting bodies and the evaluation of the organization of the work in the Local NGOs.

The entire interviewed sample mentioned that the organization of the works in the Local NGOs is in harmony with the stated objectives and this is confirmed by the membership of the organizations. Some respondents (35.3%) classify the level of membership as excellent, while 46.1% classify the membership as good or reasonable. The rest of the respondents (18.6%) classify the membership as poor. Moreover, the entire interviewed sample asserted that the renewal of membership and the administrative body of the Local NGOs

every two years is good for ensuring the participation of the maximum possible number of the members in the administration of the organizations. Moreover, the entire sample is convinced with the monthly meeting of the organizations for exchange of ideas, monitoring ongoing activities and consolidation of social relations.

**Table (5.16): Source of finance and the administration of the Local NGOs**

| Occupation           | No | Level of membership |            | Source of finance |           |       |
|----------------------|----|---------------------|------------|-------------------|-----------|-------|
|                      |    | Good                | Reasonable | Membership fees   | Donations | Sales |
| University graduates | 12 | 25                  | 50         | 100               | 75        | 50    |
| Secondary student    | 9  | 33.3                | 66.7       | 33.3              | 33.3      | 33.3  |
| Government officials | 6  | 50                  | 50         | 50                | 100       | -     |
| School teachers      | 6  | 50                  | -          | 50                | -         | -     |
| Others               | 33 | 18.2                | 63.6       | 72.7              | 9.1       | 27.3  |
| Total                | 66 | 35.3                | 46.1       | 61.2              | 43.5      | 22.1  |

The Local NGOs have different sources of finance as shown in the above table. The membership fees represents the main source of finance to the organization as claimed by the majority of the respondents (61.2%), followed by the donations from different sources like the international NGOs as mentioned by 43.5%. Some respondents (22.1%) stated that the sales of items like books and industrial products contribute significantly to the support of the organizations budget.

#### **5.2.12. Extension methods for recruiting local people**

Participation recognizes people's central role in directing their own lives. The respondents were subjected to a question concerning people participation in organizations activities and what are the channels used to recruit local people. Table (5.17) explores the responses of the respondents for target groups. Almost all the interviewed members (98.2%) agree on the importance of involving the different sectors of the community, including women and children, in the activities of the organization.

Therefore, the members call for intensification of the extension program to recruit the local people. The level of membership according to their views lag far behind the ambitions and this attributed to lack of enough information about the Local NGOs. Moreover, the entire interviewed sample suggests the importance of addressing the issue of incentives and subsidies to encourage the involvement of local communities in the activities.

**Table (5.17): Methods used to recruit the local people in the organizations**

| Occupation           | No | Recruitment of citizens | Proposal for encouraging participation |             |       |
|----------------------|----|-------------------------|--|-------------|-------|
|                      |    |                         | Meetings & seminars                    | information | Other |
| University graduates | 12 | 100                     | -                                      | 25          | 50    |
| Secondary student    | 9  | 100                     | 66.7                                   | 100         | -     |
| Government officials | 6  | 100                     | 100                                    | 100         | -     |
| Secondary teacher    | 6  | 100                     | -                                      | -           | 100   |
| Others               | 33 | 90.9                    | 36.4                                   | 36.4        | 36.4  |
| Total                | 66 | 98.2                    | 40.6                                   | 52.3        | 37.3  |

For drawing the attention of local communities the members suggest the importance of dissemination of information concerning the role of the organizations in the conservation of the environment and the possibility of the contribution of the organizations to the wellbeing of the communities as asserted by 52.3% of the respondents, while 40.6% of the respondent stated that there must be intensification of meetings and seminars since it is the possible mean through which the organizations would be in direct contact with the local people. Some respondents (37.3%) mentioned other methods that could enhance the participation of local communities like moral support and awareness raising.

### **5.2.13. Constraints and problems confronting association activities**

The members of the organizations were asked to figure out the main problems and measures of risk that confront the development of the Local NGOs in the study area. Table (5.18) shows the main constraints hindering the activities of the Local NGOs in the study area.

The majority of the respondents (72.4%) ranked the financial problems as the top constrain confronting the activities of the Local NGOs. Reliance on the membership fees and donations is not enough to launch program at medium or large scale. Even at small scale such programs can be achieved but due to sustainable flow of money, the continuity and sustainability of the activities is highly endangered. Lack of clear polices that control and regulate the work of the local NGOs was viewed by 12.2% of the respondents as a constraint confronting the activities of the organizations. This fact is further supported by 13.5% of the respondents who stressed that the organizations are not secured, while 22.4% stated that the other constraint like government policies

**Table (5.18): Constraints confronting the activities of the organizations**

| Occupation           | No | Lack of finance | No clear policies | Security | Other |
|----------------------|----|-----------------|-------------------|----------|-------|
| University graduates | 12 | 50              | -                 | 25       | -     |
| Secondary student    | 9  | 66.7            | 33.3              | 33.3     | 66.7  |
| Government officials | 6  | 100             | -                 | -        | -     |
| School teacher       | 6  | 100             | -                 | -        | -     |
| Others               | 33 | 45.5            | 27.3              | 9.1      | 45.5  |
| Total                | 66 | 72.4            | 12.2              | 13.5     | 22.4  |

## **CHAPTER VI**

### **CONCLUSIONS and RECOMMENDATIONS**

#### **6.1. Conclusions**

- The membership of the local NGOs encompasses a wide range of intellectuals most of them are professionals in the field of environment or students (high secondary or university students), and the gender issue and age groups are highly considered in the membership.
- The occupation of most of the members is either private business or government posts.
- The interviewed sample was knowledgeable about the local organizations through the mass media (press, TV and radio) and through direct contacts with the members of the organizations.
- Small proportion of the interviewed sample emphasized the existence of activities conducted by the local organizations in the study area. Some of them indicated tree planting on small scale as one of the activities of the organizations besides kindergarten and environment health.
- The participation of the local people in the activities of the organization is significantly poor, and this is attributed to the lack of extension services for the dissemination of information about the organizations.
- The respondents who participated in the programs activities contribute the low level of participation to misconceptions about the organizations and lack of fund
- The assessment of the interviewed sample to the activities of the organizations revealed that limited success was achieved. Several factors contributed to the limited success like lack of administrative structure at the study area to organize and patrol the activities beside the limited fund.
- There is no formal organization of the local people into working groups. Nafir is the common method of conducting work. Some respondents attribute the low level of participation to the lack of membership of most of the local people and most of respondents believe that the agenda of the organizations serves certain political party.

- There are no traditions that restrict the participation of women in the organizations activities, and most of the interviewed sample emphasized the importance of executing activities in mixed groups (males and females).
- the practical means for the dissemination of information regarding the activities of the organizations usually through mass media and group extension method (group discussions and meetings) and the arrangement of activities among participants is according to willingness and physical fitness.
- Meetings between the organizations staff and the target group are limited and sporadic. Usually meetings take place at afternoon or evenings which are considered as suitable time by the target group for the group discussions.
- The communication between the target groups and the organization is very poor. The staff of the organization are not recognized by most of the interviewed sample. Moreover, the bulk of the respondents are ignorant about the offices of the organizations and their telephone numbers.
- Few respondents were subjected to training in the study area. the main fields of training were; tree planting, nursery techniques and environment health.
- the perception of the local people about the role of the local NGOs is to organize the local people into working groups and formulation of scientific plans addressing conservation of the environment and raising of environmental awareness.
- The inputs for the different activities of the organizations are provided by the organizations and the local people. The organizations usually provide the simple inputs (seedlings and simple tools) and the local people provide the unwaged labor and protection of the activities.
- The main objectives of the associations as perceived by the local people are protection of the environment, afforestation, awareness raising and combating of diseases associated with pollution of environment.
- Despite the poor extension services provided to the target group, the role of the extensionists is appreciated by some respondents. The bulk of the respondents are not satisfied with the role of extension in the study area due to



their ignorance about the organizations, lack of coordination, lack of seriousness of the organizations and lack of awareness.

- The members of the organization clarified that the organizations give special consideration to ecological awareness, afforestation programs and adoption of energy substitutes. Some of these activities were not recognized by the interviewed sample.

- Selection of sites and the types of activities usually take place after reconnaissance survey and social survey by the extensionists to determine the type of activity and interventions needed.

- The participation of the local people in the organizations activities takes different forms. Some respondents participate physically while some others participate through provision of inputs or provision of finance.

- the main strategy of the Local NGOs based on the mitigation of environmental deterioration through reducing reliance on natural resources for fuel and at the same time rehabilitate the degraded habitats.

- some members of the organizations evaluate the programs of the organization as ambitious plans that can not be implemented on the ground due to lack of addressing the needs of the target groups and lack of addressing activities of income generation to raise the standard of living of the local people.

- The members asserted that the local organizations have sound relationship with international NGOs which takes the form of exchange of experience and visits besides the financial support. Moreover, the local organizations have sound relations with the related government institutions particularly FNC and HCENR.

- Most of the members of the local organizations were subjected to training sessions abroad and inside the country. The training sessions takes the forms of seminars, demonstrations and workshops.

- The main source of finance for the activities of the Local NGOs is represented in the donation and the membership fees besides the sales of the exhibitions organized by the organizations.

## **6.2. Recommendations**

- The membership of the local NGOs should be widened to cover all the sectors and categories instead of focusing on the intellectuals in the fields of environment.
- Focusing on mass media for dissemination of information about the activities of the local NGOs is not enough for the adoption of the interventions; specialized extension unit is needed to tackle the different issues addressed by the Local organizations.
- Organization of local communities into working groups including age groups and gender issue is top priority for the execution and sustainability of the adopted interventions.
- Training sessions should not be for the members of the Local organizations alone, the local people should be exposed to training sessions at the various levels.

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## **APPENDIXES**

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## Appendix (1) Citizen's questionnaire

This questionnaire was made to collect information about the role of the local NGOs in the conservation of the environment. The information will be utilized for M.Sc. Degree. Please answer the questions as accurately as possible. Where actual data are not available please use your closest estimation. Your answers will be strictly confidential.

- Sex: 1-male ( ) 2- female ( )
- Age: 15\_30 ( ) 31\_45 ( ) more than46 ( )
- Education level: illiterate ( ) Khalwa ( ) Elementary ( )  
Secondary ( ) University ( )
- Social statutes: married ( ) single ( ) widow ( )
- Source of income: Agriculture ( ) Animal rearing ( ) Government post ( )
- Private works ( )
- Is there any activity run by SECS or NNA?  
Yes ( ) No ( )
- If yes, who you know about these activities?  
Through the media ( ) through the leader ( )  
Through the associate ( )
- What are the types of the activities introduced by these organizations?  
Important stoves ( ) Trees planting ( ) Trees protection ( )  
Others, specify.....
- How the organizations recruited the local people?  
Meetings ( ) Society ( ) Others ( )
- Public participation? Automatically ( ) Hesitate ( )
- If the participation is after hesitation specify  
why.....
- What are the projects implemented by the society?  
.....
- Is activities achieved the objectives of the project?  
Yes ( ) No ( )
- If no, mention the reasons?.....



- If yes, do you think that these activities are sustainable?  
Yes ( ) No ( )
- Are there any tradition or norm that constraint your participation in program? Yes ( ) No ( )
- If yes, please specify these tradition or norms?  
.....
- Are there any problems confront women participation?  
Yes ( ) No ( )
- How the extension information exchange between you and the organizations? .....
- Which you prefer for the activities of the organizations?  
Participation of men and women ( ) Participation of men only ( )  
Participation of women only? ( )
- How are people coordinating assigned activities?
- Is the existence of the organizations created any problems?  
Yes ( ) No ( )
- If yes, specify.....
- What are the shortfalls in organization? .....
- What is time of the organizations staffs' visits?  
Morning ( ) Midday ( ) Evening ( )
- Have you any relation with the staff of the organizations?  
Yes ( ) No ( )
- If yes, explore of the relation?.....
- Do you knowing the places of the offices of the organizations?  
Yes ( ) No ( )
- Do you know the telephone numbers of the organizations?  
Yes ( ) No ( )
- Have you been subjected to training?  
Yes ( ) No ( )
- If yes, what is the type of the training?.....
- Are raising trees at your house? Yes ( ) No ( )

- Have the organizations any role in tree planting?  
Yes ( ) No ( )
- Were the organizations formed any contact groups for monitoring the activities? Yes ( ) No ( )
- Would you like to have the membership of the organizations?  
Yes ( ) No ( )
- According to your own opinion, what the role of the organizations supposed to be?  
.....
- What are the inputs provided by the organizations for the local communities?.....
- Are the activities of the organizations contradict with your priorities?  
Yes ( ) No ( )
- What are the objectives of the organizations?  
.....
- Do you believe in the potentiality of the organizations?  
Yes ( ) No ( )
- Is the performance of extension satisfactory? Yes ( ) No ( )
- If no, explore reasons?  
.....
- What are the problems and constraints confronting the organization?  
.....

## Appendix (2)

### Self-administrate questionnaire

This questionnaire was made to collect information about the role of the local NGOs in the conservation of the environment. The information will be utilized for M.Sc. Degree. Please answer the questions as accurately as possible. Where actual data are not available please use your closest estimation. Your answers will be strictly confidential.

- **Age:**.....

- **sex:**.....

- **job:** .....

- What are the activities of the organization?

.....

- Who decide the type of activities?

.....

- Assess the participation of the local people?

.....

- How the local people accept to participate in the activities?

.....

- What are the strategies of the organization for the conservation of the environment?

.....

- What are the objectives of the organization?

.....

- How do you evaluate the objectives of the organization?

Ambitious ( )      Unrealistic ( )      Reasonable ( )

- According to your perception is it true.....

The organization contributes to conservation of environment on sustainable basis?

Good ( )      Accepted ( )      unsuitable ( )

The organization is potential for raising awareness and control human activities?

Good ( )      Accepted ( )      unsuitable ( )

Collaboration of the organization with related and unrelated sectors?

Good ( )      Accepted ( )      unsuitable ( )

Support of scientific research and documentation of natural history?

Good ( )      Accepted ( )      unsuitable ( )

Raising the standard of living and achieve social equity?

Good ( )      Accepted ( )      unsuitable ( )

- What is the mechanisms and plans to achieve these objectives?

.....

- What are the international agencies the organization collaborates with?

.....

- Are the local NGOs potential for attaining sustainable development?

.....

- What the organizations benefited from the collaboration with international agencies?

.....

- What are the governmental institutions the organization collaborate with?

.....

- To what level of coordination between the organization and the FNC?

.....

- What is the nature of coordination with the governmental institutions?

.....

- What are the methods and means deployed by the organization for capacity building?

.....

- What is your opinion about the organization decree of the organization regarding.....

- Conditions of membership?

Excellent ( )      Good ( )      Accepted ( )

- Rotation of the executive committee (2 years)

Suitable ( )      Reasonable ( )      Unsuitable ( )

- Membership fees?

Good ( )      Accepted ( )      Unsuitable ( )

- Meetings (once of month)
- Suitable ( )      Reasonable ( )      Unsuitable ( )
- Sources of finance?
- Membership fee ( )      Grants ( )      Sales ( )      others ( )
- Was the organization capable in mobilizing local communities?
- Yes ( )      No ( )
- If no, to specify? .....
- What is the best time for collaboration with public?
- Morning ( )      Midday ( )      Evening ( )
- What is the role of beneficiaries in the planning, execution and evaluation projects?
- .....
- Is there training sessions for the local communities, how organized?
- .....
- How the local people are recruited for effective participation?
- .....
- What is the relationship between the organization and the mass media?
- .....
- What are the main achievements of the organization?
- .....
- What are the activities initiated by the organization for raising the standard of living? Yes ( )      No ( )
- If yes, specify .....
- What are the future plans for the organizations?
- .....
- What are the problems and constraints that confront the activities of the organization?

### Appendix (3)

**Table (1):Activities of NNA for the period 1996-2000**

| Activity   | No | Collaborating institutes |
|--|----|--------------------------|
| Applied research studies on social forestry  | 6  | IES                      |
| Data bank (Information System Services)  |    |                          |
| Short training courses in aspects related to documentation, capacity building and planning   | 3  |                          |
| Publishing of periodical Journal "Social forestry and Environment"   | 6  |                          |
| Seminars. - Protection of forest resources along the Gash River, Eastern Sudan<br>- Community forestry<br>- Information Network of Environment and Forestry  | 3  |                          |
| National Radio Programmer  | 22 | National Radio           |
| Participation in exhibitions related to environment and social forestry in Sudan   | 11 | Related institutions     |
| National T.V Programmers & T.V Educational Programmers   |    |                          |
| Participation in celebration of World Environment Day. Organized by FAO and Ministry of Agric. and Forests   |    |                          |
| Workshops on: - Management of natural forests through people participation.<br>- Management techniques of community forestry<br>- Methodologies and techniques of forestry extension<br>- Strengthening the role of women in rural development | 4  | FNC                      |
| Forums: - Protection of bio-diversity in Wadi haour by people participation<br>- Approaches of forest resource management in Sudan   |    |                          |
| Wadi haour popular corporation and fredrich Ibert foundation   |    |                          |
| Bimonthly Newsletter "Elsidr" documenting the monthly activities of the society.   |    |                          |
| Monthly forestry seminar   |    |                          |
| Study Tours:<br>Women, Children, NGOs and Community Based Organizations involved in social forestry. States: River Nile, North Kordofan, Gezira and Sennar.  | 5  |                          |

Source: NNA (2000)

## Appendix (4)

**Table (2):Activities of SSEC for the period 2000-2006(Bahri Locality)**

| Type of activities   | NO | Collaboration with                             |
|--|----|--|
| -Cleaning of area and transport of trash                         | 4  | Bahri Locality                                 |
| -Combat of mosquito  | 5  | Bahri Locality                                 |
| - Sourding and cleaning of cemetery of sub-area Bahri            |    | Huson Alkhtema organization and Bahri Locality |
| - Forestation of some sub-street                                 |    |  |
| - Presentation about the role of women in health of environment  |    | SSEC   |
| -Establishment of Nursery in the school for training of students |    |  |
| - Training session for women in nursery home                     |    | Bahri Hospital                                 |
| - Combat of homeless   |    |  |
| - Training session and seminars in Halfaia area                  | 13 |  |
| -Forestation of Elhai Elrabih in Halfaia                         |    |  |
| -Establishment of Kindergarten in Halfaia                        |    |  |

**Source: SSEC 2000**